RTD02 Conservation And Land Management Training Package

The contents of this volume refer only to the Endorsed Components of RTD02 Conservation & land Management Training Package. This volume should not be read in isolation but in the context of the Training Package as a whole.

Volume 1 of 2

Endorsed by the National Training Quality Council 01/06/02.
RTD02 Conservation And Land Management Training Package
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Published by:
Australian Training Products Ltd
Level 25, 150 Lonsdale Street
Melbourne
VIC 3000
Phone: +61 3 9655 0600
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First published: 1 June 2002
ISBN: 0 642 79860 5 (set)

Printed by:
Document Printing Australia Pty Ltd
332 - 342 Lorimer St
Port Melbourne
VIC 3207
Phone: (03) 9684 1200

AEShareNet Code: P
Print Version No: 1.00
Release Date: 1/06/2002
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Preliminary Information

Important Note to Users

Training Packages are not static documents; they are amended periodically to reflect the latest industry practices and are version controlled. It is essential that the latest version is always used.

Check the version number before commencing training or assessment

This Training Package is Version 1.00 - check whether this is the latest version by going to the National Training Information Service (www.ntis.gov.au) and locating information about the Training Package. Alternatively, contact Agri-Food Industry Skills Council at http://www.agrifoodskills.net.au to confirm the latest version number.

Explanation of version number conventions

The primary release Training Package is Version 1. When changes are made to a Training Package, sometimes the version number is changed and sometimes it is not, depending on the extent of the change. When a Training Package is reviewed it is considered to be a new Training Package for the purposes of version control, and is Version 1. Do not confuse the version number with the Training Package's national code (which remains the same during its period of endorsement).

Version modification history

The version details of this endorsed Training Package are in the table below. The latest information is at the top of the table.

<table>
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Forms control: All endorsed training packages will have a version number displayed on the imprint page of every volume constituting that training package. Every training package will display an up-to-date copy of this modification history form, to be placed immediately after the contents page of the first volume of the training package. Comments on changes will only show sufficient detail to enable a user to identify the nature and location of the change. Changes to training packages will generally be batched at quarterly intervals. This modification history form will be included within any displayed sample of that training package and will constitute all detail available to identify changes.
Summary of AQF qualifications in this Training Package

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<td>RTD60102</td>
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# Units of competency in this Training Package and their prerequisites

Note – the pre-requisite column is only displayed if pre-requisites exist.

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### Imported units of competency in this Training Package

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<td>TBA</td>
</tr>
<tr>
<td>RTC5011A</td>
<td>Collect and classify plants</td>
<td>TBA</td>
</tr>
<tr>
<td>RTC5201A</td>
<td>Conduct comprehensive inspection of park facilities</td>
<td>TBA</td>
</tr>
<tr>
<td>RTC5303A</td>
<td>Manage machinery and equipment</td>
<td>TBA</td>
</tr>
<tr>
<td>RTC5504A</td>
<td>Develop a management plan for a designated area</td>
<td>TBA</td>
</tr>
<tr>
<td>RTC5519A</td>
<td>Conduct biological surveys</td>
<td>TBA</td>
</tr>
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<td>Code</td>
<td>Title</td>
<td>Origin</td>
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<tr>
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<td>------------------------------------------------------------</td>
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<tr>
<td>RTC5520A</td>
<td>Manage parks and reserves</td>
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<tr>
<td>RTC5701A</td>
<td>Establish and maintain the enterprise OHS program</td>
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<tr>
<td>RTC5702A</td>
<td>Develop and manage a chemical use strategy</td>
<td>TBA</td>
</tr>
<tr>
<td>RTC5801A</td>
<td>Provide specialist advice to clients</td>
<td>TBA</td>
</tr>
<tr>
<td>RTC5908A</td>
<td>Prepare estimates, quotes and tenders</td>
<td>TBA</td>
</tr>
<tr>
<td>RTC5913A</td>
<td>Collect and manage data</td>
<td>TBA</td>
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<td>RTC5914A</td>
<td>Prepare reports</td>
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<td>SRXTEM004A</td>
<td>Deal with conflict</td>
<td>TBA</td>
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<tr>
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<td>Source goods/services and evaluate contractors</td>
<td>TDT02</td>
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<td>TDTR398B</td>
<td>Negotiate a contract</td>
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<td>THTFAT01B</td>
<td>Provide on-site information and assistance</td>
<td>THT02</td>
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<td>THTFTG01B</td>
<td>Work as a guide</td>
<td>THT02</td>
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<tr>
<td>THTFTG07B</td>
<td>Research and share general information on Australian</td>
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<td>Interpret aspects of local Australian indigenous culture</td>
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<td>Prepare specialised interpretive content (cultural and</td>
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<td>Plan and develop interpretive activities</td>
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<td>THTPPD07B</td>
<td>Plan and develop culturally appropriate tourism operations</td>
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**Explanation of the review date**

The review date (shown on the title page and in the header of each page) indicates when the Training Package is expected to be reviewed in the light of changes such as changing technologies and circumstances. The review date is not an expiry date. Endorsed Training Packages and their components remain current until they are reviewed or replaced.
Overview

What is a Training Package?

A Training Package is an integrated set of nationally endorsed competency standards, assessment guidelines and Australian Qualifications Framework (AQF) qualifications for a specific industry, industry sector or enterprise.

Each Training Package:

- provides a consistent and reliable set of components for training, recognising and assessing people's skills, and may also have optional support materials
- enables nationally recognised qualifications to be awarded through direct assessment of workplace competencies
- encourages the development and delivery of flexible training which suits individual and industry requirements
- encourages learning and assessment in a work-related environment which leads to verifiable workplace outcomes.

How do Training Packages fit within the National Training Framework?

The National Training Framework is made up of the nationally agreed quality arrangements for the vocational education and training sector, the Australian Quality Training Framework (AQTF), and Training Packages endorsed by the National Training Quality Council (NTQC).

How are Training Packages developed?

Training Packages are developed by Industry Skills Councils or enterprises to meet the identified training needs of specific industries or industry sectors. To gain national endorsement of Training Packages, developers must provide evidence of extensive research, consultation and support within the industry area or enterprise.

How do Training Packages encourage flexibility?

Training Packages describe the skills and knowledge needed to perform effectively in the workplace without prescribing how people should be trained.

Training Packages acknowledge that people can achieve vocational competency in many ways by emphasising what the learner can do, not how or where they learned to do it. For example, some experienced workers might be able to demonstrate competency against the units of competency, and even gain a qualification, without completing a formal training program.

With Training Packages, assessment and training may be conducted at the workplace, off-the-job, at a training organisation, during regular work, or through work experience, work placement, work simulation or any combination of these.

Who can deliver and assess using Training Packages?

Training and assessment using Training Packages must be conducted by a Registered Training Organisation (RTO) that has the qualifications or specific units of competency on its scope of registration, or that works in partnership with another RTO as specified in the AQTF Standards for Registered Training Organisations.

Training Package Components

Training Packages are made up of mandatory components endorsed by the NTQC, and optional support materials.
Training Package Endorsed Components

The nationally endorsed components include the Competency Standards, Assessment Guidelines and Qualifications Framework. These form the basis of training and assessment in the Training Package and, as such, they must be used.

Competency Standards

Each unit of competency identifies a discrete workplace requirement and includes the knowledge and skills that underpin competency as well as language, literacy and numeracy; and occupational health and safety requirements. The units of competency must be adhered to in training and assessment to ensure consistency of outcomes.

Assessment Guidelines

The Assessment Guidelines provide an industry framework to ensure all assessments meet industry needs and nationally agreed standards as expressed in the Training Package and the Standards for Registered Training Organisations. The Assessment Guidelines must be followed to ensure the integrity of assessment leading to nationally recognised qualifications.

Qualifications Framework

Each Training Package provides details of those units of competency that must be achieved to award AQF qualifications. The rules around which units of competency can be combined to make up a valid AQF qualification in the Training Package are referred to as the 'packaging rules'. The packaging rules must be followed to ensure the integrity of nationally recognised qualifications issued.

Training Package Support Materials

The endorsed components of Training Packages are complemented and supported by optional support materials that provide for choice in the design of training and assessment to meet the needs of industry and learners.

Training Package support materials can relate to single or multiple units of competency, an industry sector, a qualification or the whole Training Package. They tend to fall into one or more of the categories illustrated below.
Training Package support materials are produced by a range of stakeholders such as RTOs, individual trainers and assessors, private and commercial developers and Government agencies.

Where such materials have been quality assured through a process of 'noting' by the NTQC, they display the following official logo. Noted support materials are listed on the National Training Information Service (NTIS), together with a detailed description and information on the type of product and its availability (www.ntis.gov.au).

It is not compulsory to submit support materials for noting; any resources that meet the requirements of the Training Package can be used.

**Training Package, Qualification and Unit of Competency Codes**

There are agreed conventions for the national codes used for Training Packages and their components. Always use the correct codes, exactly as they appear in the Training Package, and with the title always following the code.

**Training Package Codes**

Each Training Package has a unique five-character national code assigned when the Training Package is endorsed, for example RTD02. The first three characters are letters identifying the Training Package industry coverage and the last two characters are numbers identifying the year of endorsement.

**Qualification Codes**

Within each Training Package, each qualification has a unique eight-character code, for example RTD10102. The first three letters identify the Training Package; the first number identifies the qualification level (noting that arabic numbers are not used in qualification titles themselves); the next two numbers identify the position in the sequence of the qualification at that level; and the last two numbers identify the year in which the qualification was endorsed. (Where qualifications are added after the initial Training Package endorsement, the last two numbers may differ from other Training Package qualifications as they identify the year in which those particular qualifications were endorsed).

**Unit of Competency Codes**

Within each Training Package, each unit of competency has a unique code. The unit of competency codes are assigned when the Training Package is endorsed, or when new units of competency are added to an existing endorsed Training Package.
A typical code is made up of 12 characters, normally a mixture of uppercase letters and numbers, as in RTD1501A. The first three characters signify the Training Package (RTD02 Conservation And Land Management Training Package in the above example) and up to eight characters, relating to an industry sector, function or skill area, follow. The last character is always a letter and identifies the unit of competency version. The 'A' in the example above indicates that this is the original unit of competency. An incremented version identifier usually means that minor changes have been made. Typically this would mean that wording has changed in the range statement or evidence guide, providing clearer intent. Where changes are made that alter the outcome, a new code is assigned and the title is changed.

**Training Package, Qualification and Unit of Competency Titles**

There are agreed conventions for titling Training Packages and their components. Always use the correct titles, exactly as they appear in the Training Package, and with the code always placed before the title.

**Training Package Titles**

The title of each endorsed Training Package is unique and relates the Training Package's broad industry coverage.

**Qualification Titles**

The title of each endorsed Training Package qualification is unique. Qualification titles use the following sequence:

- firstly, the qualification is identified as either Certificate I, Certificate II, Certificate III, Certificate IV, Diploma or Advanced Diploma
- this is followed by the words 'in' for Certificates I to IV and 'of' for Diploma and Advanced Diploma
- then the industry descriptor follows, for example Telecommunications, and
- if applicable, the occupational or functional stream follows in brackets, for example (Computer Systems).

For example:

- RTD10102 Certificate I in Conservation and Land Management
- RTD20102 Certificate II in Conservation and Land Management

**Unit of Competency Titles**

Each unit of competency title is unique. Unit of competency titles describe the competency outcome concisely, and are written in sentence case.

For example:

- RTD1501A Support natural area conservation
- RTD2004A Collect, prepare and preserve plant specimens
Conservation and Land Management Training Package

The Conservation and Land Management Training Package represents the culmination of many years of work for a number of industries involved in conservation and land management work. From the early to mid-1990s, these industries had worked independently in the development of draft competency standards. A scoping project conducted by the Rural Training Council of Australia in 1999 recommended that these draft standards form part of a single ‘Conservation and Land Management Training Package’.

The level of consultation and support from industry and registered training organisations in the development of this Training Package has been extensive. With work commencing in September 2000, over 20 workshops were held across Australia involving some 450 participants. Additionally, the use of the Internet has enabled many others to review draft materials and to comment. The extensive networks of many stakeholders have also meant that information about this Training Package has permeated the Intranets of many State and Federal government agencies.

Coverage of the Conservation and Land Management Training Package

This Training Package services several, well-defined industry sectors as well as a wide range of jobs and roles involving land management which are more difficult to classify and group. Key industry sectors include:

- Community Co-ordination and Facilitation
- Conservation Earthworks
- Indigenous Land Management
- Lands, Parks and Wildlife
- Natural Area Restoration
- Vertebrate Pest Management
- Weed Management

History of Development

The Conservation and Land Management Training Package had its origins with a number of self-defined industry groups who commenced development of competency standards in the 1990s. These draft competency standards formed the basis of work undertaken to prepare the Conservation and Land Management Training Package. The industry coverage of these groups and background on the development of their draft competency standards are described below.

Conservation Earthworks

The Conservation Earthworks Industry is involved in the design and construction of earthworks associated with soil conservation on rural properties, and erosion and sediment control on rural, urban and infrastructure construction sites. Work can include the forming of farm dams, contour banks, waterways, gully restoration and clearing, access tracks, erosion control works, sediment traps and basins, and the revegetation of development sites.

Over the past decade, there has been a nationwide emphasis on landcare and environmental issues with a particular focus on education, training and skills development.

In 1990, the NSW Department of Land and Water Conservation (DLWC) (formerly NSW Soil Conservation Service) initiated a project to document the skills and knowledge required for planning, constructing and maintaining conservation earthworks. This project was completed in 1993. A series of 20 manuals was produced as a result of the project.

In 1992, draft competency standards were developed by DLWC prior to a joint venture with NSW TAFE to develop curriculum and qualifications for the conservation earthworks industry. ACTRAC funded the curriculum project which ran from January 1993 to 1995.
In 1993, the Conservation Earthworks Reference Group (CEWRG) was formed with representation from all States and Territories except South Australia, and met for the first time in Sydney in March 1993.

In 1995, the RTCA was approached by DLWC to formalise the draft Conservation earthworks competency standards prepared by the CEWRG.

In 1996, a project managed by the RTCA was undertaken involving consultation with stakeholders from across Australia. This resulted in a set of draft competency standards in Conservation Earthworks. However, these were not able to be nationally endorsed through ANTA as they were outside a relevant Training Package.

In 1997, an attempt was made to present these draft standards as a stand alone Training Package following guidelines set out by ANTA. After considerable consultation and discussion, ANTA advised the RTCA that the proposed Conservation Earthworks Training Package could not be endorsed as a Training Package as it did not cover a broad enough scope of industries.

In 1998, the concept of a Training Package covering industries involved in "Land management, conservation and related areas" emerged, and following a scoping project there was a recommendation by the consultants DNR Group Pty Ltd, that Conservation Earthworks be included as part of a "Conservation and Land Management Training Package".

**Indigenous Land Management**

Although originating from initiatives in the training of Indigenous rangers for national parks, Indigenous Land Management now covers a broad range of land management skills and knowledge which may be integrated with skills and knowledge from a range of other areas such as agriculture, horticulture and tourism.

Indigenous land management is distinctive in that it is undertaken within the context of Indigenous culture and traditional customs. This requires, in some cases, approval from local communities or traditional owners for delivery and assessment of units of competency, and acknowledgment of protocols and parameters governing access to and use of Indigenous knowledge and skills.

Training in Indigenous Land Management was addressed as far back as 1979 when the first Ranger Training program for Aboriginal and Torres Strait Islander people was initiated in Kakadu National Park.

Between 1989 and 1991, National and State nature conservation agencies established their Aboriginal recruitment, training and career development strategies, which primarily addressed ranger training needs.

In 1990, the NSW Parks Service introduced a cadetship/traineeship program for Indigenous Rangers enrolling 15 participants in the first year.

In 1991, a curriculum audit was undertaken in South Australia to determine the extent to which Indigenous skills and knowledge were accredited as part of environmental and cultural heritage programs. Following this work, the South Australian Aboriginal Land Management Steering Committee (SAALMSC) was appointed to oversee Indigenous land management training programs with funding provided by ATSIC and DEET.

In 1990, Cairns TAFE initiated a Community Ranger Program designed to incorporate Indigenous skills and knowledge and involve Elders in delivering components of the course.

In 1991, the SAALMSC applied for national accreditation with ANTA and ACTRAC for its program. This was denied as it was "too locally focused on the South Australian environment? and required greater consultation throughout Australia in order to meet the national criteria."

The SAALMSC then joined forces with Cairns TAFE and funding was gained from ANTA to conduct an up-to-date curriculum audit and establish a Steering Committee and Industry Reference Group to
consult with community groups throughout Australia.

In August 1994, the "Caring for Country" National Curriculum Development Steering Committee and Industry Reference Group was established.

In May 1996, the final report for the "Caring for Country" National Curriculum Framework was submitted to ANTA through the Aboriginal and Torres Strait Islander Peoples Training Advisory Council (ATSIPTAC).

In 1998, funding became available through the Aboriginal and Torres Strait Islander Curriculum Consortium at Tropical North Institute of TAFE (Cairns) and a course was developed in Natural and Cultural Resource Management - Caring for Country covering AQF levels 2-6.

Also in 1998, the Chair of ATSIPTAC, Mr Kevin Bromley, approached ANTA about the national endorsement of Indigenous land management as a Training Package.

This resulted in a concept of a broad-based Training Package covering industries involved in "Land management, conservation and related areas" and, following a scoping project, there was a recommendation by the consultants DNR Group Pty Ltd that Indigenous land management be included as part of a "Conservation and Land Management Training Package".

**Vertebrate Pest Management**

Animals that are classified as 'vertebrate pests' represent complex management problems for agriculture and the environment. Their control can involve a range of techniques such as fencing, habitat modification, trapping, pasture/crop management, shooting, relocation, and poisoning. These control techniques are usually carried out under an Integrated Pest Management approach within local, regional, State and/or national management planning frameworks and strategies.

The need to review and improve the management of pest animals through a nationally co-ordinated approach has been long recognised at the State and Commonwealth levels. In the 1990s, there was a changing emphasis from legislative enforcement to encouragement of appropriate management practices for dealing with pest animals. Education and training was seen as an important part of this new approach.

In February 1995, the National Vertebrate Pests Committee (VPC), with representatives from all States, sponsored a two-day workshop in Melbourne to plan the development of national competency standards, national curriculum and training resources for the vertebrate pest management industry. State agricultural and conservation agencies and the RTCA were represented at this workshop. In April 1996, the VPC was contracted by the Bureau of Research Science to develop national competency standards for the vertebrate pest management industry. NSW Agriculture managed the project. In October 1997, draft competency standards were forwarded to the RTCA. After considerable discussion, ANTA indicated that it could not accept these standards as a stand-alone Training Package due to their "limited coverage".

In 1998, the concept of a Training Package covering industries involved in "Land management, conservation and related areas" emerged and, following a scoping project, there was a recommendation by the consultants DNR Group Pty Ltd that Vertebrate Pest Management be included as part of a "Conservation and Land Management Training Package".

**Community Co-ordination and Facilitation**

Competency standards for community co-ordination and facilitation focus on the knowledge and skills required to foster, promote and support community development, particularly in rural communities that are engaged in land management activities. The work of these communities underscores the notion that conservation and land management is also about co-ordination and facilitation within communities and groups involved in land management.

The proposal to provide training for those involved in community co-ordination and facilitation originated in the National Landcare Program in the mid-1990s.
In 1994-5, competency standards for Landcare Group Project Co-ordinators were prepared. However, these were not taken up by registered training organisations or industry.

In the 1995 Annual Report, the National Landcare Facilitator stated that:

"co-ordinators and facilitators need better training to support a broader community development role and to encourage greater independence and creativity of groups . . . [and that]. . . competency standards should be developed for regional landcare facilitators and catchment co-ordinators . . ."

In 1996, the National Landcare Advisory Committee requested funding from the Department of Primary Industries and Environment Australia for a project to improve training for co-ordinators and facilitators.

Consequently, funding was provided under National Heritage Trust (NHT) for the development of competency standards for co-ordinators, facilitators and group leaders working in NHT programs.

A national Project Management Committee (PMC) was formed in mid-1997 and a consultant was appointed in July 1997 to develop the competency standards. The Public Safety ITAB was asked by ANTA to provide a representative on the PMC.

Between July 1997 and July 1998, national consultation was undertaken by a consultant resulting in the preparation of draft competencies for community co-ordinators and facilitators.

In August 1998, ANTA indicated that the competencies did not meet the requirements of a stand alone Training Package, so an approach was made to the Accreditation and Recognition Council (SA) to have the competencies accredited as a course.

In June 1999, a number of courses titled Natural Resource Management (Community Programs) were accredited in South Australia from Certificate II to Advanced Diploma level. As the courses were being finalised, Agriculture Forestry Fisheries - Australia (AFFA) and Environment Australia embarked on a national pilot project to implement what became known as the Skills Tool Kit.

In 1999, a scoping project covering "Land management, conservation and related areas" recommended that the Skills Tool Kit be included as part of a "Conservation and Land Management Training Package".

Lands, Parks and Wildlife

The Lands, Parks and Wildlife industry comprises government and non-government agencies with a primary responsibility to manage places and areas of natural and cultural significance. This management is undertaken according to relevant legislation, international, national and local agreements, policies, recognised codes of practice, charters and guidelines.

- Some of the main areas of work for those in Lands, Parks and Wildlife include:
  - Conservation of ecosystems
  - Working in community conservation
  - Managing introduced pests and diseases
  - Supporting community education and interpretation
  - Responding to emergencies
  - Involvement in National and International Conservation
  - Overseeing commercial, recreational and scientific activities
  - Management of properties and structures
  - Supporting and overseeing tourism activities in parks
  - Supporting Indigenous heritage and involvement in land management

From the early 1990s, there has been an emerging interest across a number of nature conservation agencies in improving the skills and knowledge of the workforce involved in natural and cultural resource management.

As a result of this interest, in November 1993 the Natural and Cultural Resource Management Industry Reference Group (NCRMIRG) was formed and met in Adelaide. The NCRMIRG comprised
representative from the staff training and development areas of the major State and Territory nature conservation agencies.

In 1994, the Australian Nature Conservation Agency (ANCA) received funding from ANTA to scope curricula relating to natural and cultural resource management.

While this work was being completed, the NCRMiRG investigated aligning itself with a national ITAB so that national competency standards could be prepared. In November 1994 a number of ITABs were contacted and following negotiations, an approach was made for coverage under the Joint Australian Public Services Training Council (JAPSTC). The National Training Board approved this in June 1995.

With the support of the Australian and New Zealand Environment and Conservation Committee (ANZECC) Working Group in June 1995, a project to develop competency standards in natural and cultural resource management was initiated. Participating agencies also agreed to contribute funds to the project work.

In early 1996, the National Public Administration ITAB took over coverage of the NCRMiRG. On 15 May 1996, ANTA approved funding for competency standards development and a project consultant was engaged in August 1996 to undertake the work.

The demise of the National Public Administration ITAB in June 1997 saw the NCRMiRG being covered by the Public Safety ITAB.

The development of the draft competency standards had involved extensive consultation with stakeholders around Australia in 1997 and 1998. However, by late 1998 it was apparent that there were difficulties in proceeding with the draft standards due to changes that had resulted from the introduction of Training Packages and issues related to ITAB coverage.

In December 1998, a number of changes occurred. The NCRMiRG became the Lands, Parks and Wildlife Reference Group (LPWRG) with coverage by the Rural Training Council of Australia, and a new consultant was engaged to redraft the standards into the new format.

An LPWRG workshop in March 1999 saw a revised draft of competency standards and AQF Packaging proposed.

In 1999, a scoping project covering industries involved in "Land management, conservation and related areas" recommended that lands, parks and wildlife be included as part of a "Conservation and Land Management Training Package".

**Weed Management**

Weed management covers work associated with the management and control of weeds on public and private lands, commercial production systems, or in response to broader land management objectives. Those involved in weed management include the rural industry, contractors, State land management agencies, bush regeneration personnel and local council staff.

Goal three of the National Weeds Strategy (1997) aims "to provide the framework and capacity for ongoing management of weed problems of national significance" and is supported by three specific strategies. These aim to educate weed management practitioners in integrated weed management, moving away from an undue reliance on simplistic spray, slash and burn practices.

The National Weeds Strategy Executive Committee, in conjunction with NSW Agriculture, RTCA and representatives of the agricultural and environmental sectors from all States and Territories met in May 1998 to plan and develop a set of National Training Competencies for Weed Management. The Standing Committee on Agriculture and Resource Management supported this approach.

The competencies were designed to cover a range of agricultural, environmental and community based occupations.

All States and Territories agreed to participate in the development of the competencies and NSW Agriculture undertook to seek funding for the project on behalf of the group. NHT funding was
obtained and Tocal College selected to facilitate national consultation and drafting of the competencies. Industry members participated in a series of meetings conducted in all states and territories, with the national competencies completed by late 1999.

Upon their completion the competencies were not endorsed, as discussions were in progress for the development of a Conservation and Land Management Training Package, of which weed management was seen as a component.

Subsequently, following a national scoping project, there was a recommendation that Weed Management be included as part of a "Conservation and Land Management Training Package".

**Natural Area Restoration**

Natural area restoration is a newly defined industry sector which emerged with this Training Package. It represents a large number of people and organisations engaged in the restoration and management of natural areas including bushland, forest, arid lands, coastal, wetland and aquatic sites. Work covers planning, management and restoration, and management activities associated with increasing the physical stability, biodiversity and/or ecological integrity of an area.

A large number of groups are represented within this sector. Many have developed unique approaches, philosophies and techniques towards conservation and land management. This factor, combined with the groups' wide distribution across Australia, means that the Conservation and Land Management Training Package has presented the first real opportunity to develop national competency standards in this area.

Some groups covered under the natural area restoration include the following:

- Greening Australia
- Conservation Volunteers Australia
- Trees for Life/Men of the Trees
- Australian Association of Bush Regenerators
- Catchment, Landcare, Bushcare, Coastcare and Rivercare Groups
- Friends of Parks Groups
- Various government funded programs and agencies
- Contractors and consultants who provide services in natural area restoration and management
- Other conservation and specialist interest groups and networks

One distinctive element of this sector is the high proportion of volunteers who are engaged in natural area restoration activities. It is anticipated that, through access to qualifications based on competencies in the Conservation and Land Management Training Package, there will be further expansion of volunteer numbers including that provided by schools and vocational education and training institutions. This is likely to emerge from the need to develop skills to meet the required competencies and as a consequence of increased career and training options afforded by the Conservation and Land Management Training Package.

**General Land Management**

As the type and scope of work in conservation and land management is very broad and evolving, a general qualification has been designed to support those whose work may not sit easily within the self-defined sectors. These qualifications are broad enough that, with customisation of units, other specialisations can be defined, thereby providing relevant outcomes from training and assessment for particular enterprises, agencies, and natural resource management training initiatives.

**Consultation and Validation of the CLM Training Package**

A scoping project completed in November 1999 recommended the development of a Conservation and Land Management Training Package incorporating all the above sectors into a single Training Package. With ANTA funding and under RTCA management, the development process commenced in October...
2000 and was completed in January 2002. Consultation throughout this project was extensive and included the following:

- Some 23 workshops in rural and remote areas and major cities across all States and Territories of Australia involving over 400 participants.
- Release of three draft Training Packages for downloading on the project website which was accessed by an estimated 2000 people.
- Email and mail out updates to over 1000 stakeholders.
- Additional meetings and discussions with public Registered Training Organisations (RTOs).
- Additional consultation sessions with special interest groups throughout the project.
- Strong support from government-based stakeholders who disseminated information across their departmental Intranets and State and national industry networks.
Introduction

Characteristics of the CLM workforce

Conservation Earthworks

The Civil Contractors Federation estimates that there are some 30,000 plant operators in Australia and it is estimated that 10,000 of these are involved in conservation and land management. Additional employment in the industry numbers a further 10,000 including farmers, contractors, Federal, State and Local Government plant operators and managers of small contracting businesses.

Community Coordination and Facilitation

During the 1990's Australia experienced a major shift towards community participation in natural resource management. In 2002 it is estimated that there are over 4000 autonomous volunteer community groups and their grass roots leaders fostered by the "Decade of Landcare".

While most of these groups comprise farmers and other landowners seeking to increase the sustainability of their own land use, there are also hundreds of groups in cities and towns across Australia working to conserve and protect parks, bushland, creeks, rivers and streets.

An ethic of land stewardship drives hundreds of community groups working along our coasts. There are other community-based networks, with more specific interests such as forestry and fishery management.

Lands, Parks and Wildlife

Employment in lands, parks and wildlife at state and territory levels occurs across a range of departments often with multiple responsibilities that may include primary industry, heritage, land and water conservation, forestry, coastal protection and fisheries. The major employer at the federal level is Environment Australia.

There is also a number of private or non-government organisations working in natural and cultural resource management including private parks/reserves, community groups, land councils, mining and some local governments. It is estimated that there are some 10,000 people employed in this industry across Australia.

Natural Area Restoration

Currently it is estimated that there are over 2000 students engaged in related formal studies. The demand for training - and traineeships - in this area is extremely high. Many secondary schools are keen to train in this area. There are approximately 100,000 people involved in natural area restoration predominantly as volunteers. However, 'real jobs' are estimated at around 8,000 comprising Federal, State and Local Government, consultants and project related workers.

Indigenous Land Management

Aboriginal and Torres Strait Islander Peoples own or lease some 17% of the Australian land area. A large proportion of this land has been degraded by inappropriate land use in the past and there is a growing responsibility for those living in these areas to manage and rehabilitate their land. The management required is a mixture of western land management practices combined with local knowledge and practices.

Some 270,000 Aboriginal and Torres Strait Islander people live in these regions. The number of people formally employed in land management-related activities is estimated at 10,000 in work such as tourism, national parks, agriculture, horticulture and land and sea management while many communities have established joint management agreements with government agencies. Indigenous people are employed by Federal, State and Local Government in land management and by local
communities.

**Vertebrate Pest Management**

It is estimated that the industry employs over 2,500 people covering Rural Lands Protection Boards, private contractors, National Feral Animal Control Program, Federal, State and Local Government agencies. These figures do not include those employed in vertebrate pest control by lands, parks and wildlife and indigenous land management sectors.

**Weed Management**

It is estimated that the industry employs over 5,000 people covering private contractors, federal, state government and local government agencies and a further 50,000 volunteers in Land Care, Bush Care, Coast Care and similar programs.

**New Apprenticeships (traineeships)**

Delivery and evaluation of skills in the workplace will be new to many in the industry under the Conservation and Land Management Training Package.

Only a single AQF Level 2 traineeship (Certificate II in Land Conservation) has been available in recent years. With endorsement of the Training Package, it is likely that a number of new traineeships will emerge to suit the particular needs of different industry stakeholder groups and enterprises.

**Flexibility**

The hallmark of the Conservation and Land Management Training Package is its flexibility. The diversity of this workforce requires a training package which can underpin high quality training in a wide range of environments and contexts. This flexibility is achieved through:

- Flexible AQF packaging allowing wide-ranging choices in structuring a qualification.
- A limited number of compulsory units at the lower levels.
- Open electives that enable incorporation of units from other Training Packages where appropriate.
- Options to customise units to suit contexts, enterprises or stakeholder requirements.

**Industry Validation**

Representatives from the following groups and/or agencies were consulted as part of the industry validation of the Conservation and Land Management Training Package.

**Natural Area Restoration Industry Reference Group**

- Aust Association of Bush Regenerators
- Conservation Volunteers Australia
- Department of Land and Water Conservation (NSW)
- Greening Australia
- Local Government Association
- TAFE (Vic) - NRM Network

**Vertebrate Pest Management Industry Reference Group**

- ACT Parks and Conservation Service
- WA Department of Agriculture
- Biosecurity Australia (Agriculture, Fisheries and Forestry - Australia)
- Bureau of Rural Sciences (Agriculture, Fisheries and Forestry - Australia)
- CSIRO Sustainable Ecosystems
- Department of Natural Resources and Mines (Qld)
Weed Management Industry Reference Group

- WA Department of Agriculture
- Department of Natural Resources and Mines (Qld)
- Department of Natural Resources and Environment (Vic)
- Department of Primary Industries, Water and Environment (Tas)
- National Weeds Strategy
- NSW Agriculture
- Animal & Plant Control Commission (SA)
- Primary Industries and Resources (SA)
- NSW Noxious Weeds Officers Association
- TAFE NSW
- Tocal

Indigenous Land Management Industry Reference Group

This role was undertaken by AITAC - the Australian Indigenous Training Advisory Council - which is the peak national body in vocational education and training for Indigenous people with representation across all state and territories.

Conservation Earthworks Industry Reference Group

- WA Department of Agriculture
- Australian Workers Union
- Department of Land and Water Conservation (NSW)
- Department of Lands Planning and Environment (NT)
- Department of Primary Industries, Water and Environment (Tas)
- Earthmoving Contractors & Consultants
- Plant Operator Training (SA)

Lands, Parks and Wildlife Industry Reference Group

- Australian Workers Union
- Community and Public Sector Union
- National Parks and Wildlife South Australia, Department of Environment and Heritage (SA)
- Department of Land and Water Conservation (NSW)
- Environment Australia (Commonwealth)
- Environmental Protection Agency (Queensland)
- National Parks and Wildlife Service (NSW)
- Parks Victoria
- Parks and Wildlife Commission of the Northern Territory
- Conservation and Land Management (WA)

Community Coordination and Facilitation Industry Reference Group

- Agriculture, Fisheries and Forestry - Australia
- Catchment Groups
- Environment Australia (Commonwealth)
- Local Government Association
- National Landcare Facilitator
- NSW Agriculture (RTO)
Qualifications Framework

The Australian Qualifications Framework

What is the Australian Qualifications Framework?

A brief overview of the Australian Qualifications Framework (AQF) follows. For a full explanation of the AQF see the AQF Implementation Handbook, 3rd Edition 2002. You can download it from the Australian Qualifications Advisory Board (AQFAB) website (www.aqf.edu.au) or obtain a hard copy by contacting AQFAB on phone 03 9639 1606 or by emailing AQFAB on aqfab@curriculum.edu.au

The AQF provides a comprehensive, nationally consistent framework for all qualifications in post-compulsory education and training in Australia. In the vocational education and training (VET) sector it assists national consistency for all trainees, learners, employers and providers by enabling national recognition of qualifications and Statements of Attainment.

Training Package qualifications in the VET sector must comply with the titles and guidelines of the AQF. Endorsed Training Packages provide a unique title for each AQF qualification which must always be reproduced accurately.

Qualifications

Training Packages can incorporate the following eight AQF qualifications.

- Certificate I in …
- Certificate II in …
- Certificate III in …
- Certificate IV in …
- Diploma of …
- Advanced Diploma of …
- Vocational Graduate Certificate of …
- Vocational Graduate Diploma of …

On completion of the requirements defined in the Training Package, a Registered Training Organisation (RTO) may issue a nationally recognised AQF qualification. Issuance of AQF qualifications must comply with the advice provided in the AQF Implementation Handbook and the Australian Quality Training Framework Standards for Registered Training Organisations, particularly Standard 10.

Statement of Attainment

Where an AQF qualification is partially achieved through the achievement of one or more endorsed units of competency, an RTO may issue a Statement of Attainment. Issuance of Statements of Attainment must comply with the advice provided in the AQF Implementation Handbook and the Australian Quality Training Framework Standards for Registered Training Organisations, particularly Standard 10.

Under the Standards for Registered Training Organisations, RTOs must recognise the achievement of competencies as recorded on a qualification or Statement of Attainment issued by other RTOs. Given this, recognised competencies can progressively build towards a full AQF qualification.

AQF Guidelines and Learning Outcomes

The AQF Implementation Handbook provides a comprehensive guideline for each AQF qualification. A summary of the learning outcome characteristics and their distinguishing features for each VET related AQF qualification is provided below.
Certificate I

*Characteristics of Learning Outcomes*

Breadth, depth and complexity of knowledge and skills would prepare a person to perform a defined range of activities most of which may be routine and predictable.

Applications may include a variety of employment related skills including preparatory access and participation skills, broad-based induction skills and/or specific workplace skills. They may also include participation in a team or work group.

*Distinguishing Features of Learning Outcomes*

Do the competencies enable an individual with this qualification to:

- demonstrate knowledge by recall in a narrow range of areas;
- demonstrate basic practical skills, such as the use of relevant tools;
- perform a sequence of routine tasks given clear direction
- receive and pass on messages/information.

Certificate II

*Characteristics of Learning Outcomes*

Breadth, depth and complexity of knowledge and skills would prepare a person to perform in a range of varied activities or knowledge application where there is a clearly defined range of contexts in which the choice of actions required is usually clear and there is limited complexity in the range of operations to be applied.

Performance of a prescribed range of functions involving known routines and procedures and some accountability for the quality of outcomes.

Applications may include some complex or non-routine activities involving individual responsibility or autonomy and/or collaboration with others as part of a group or team.

*Distinguishing Features of Learning Outcomes*

Do the competencies enable an individual with this qualification to:

- demonstrate basic operational knowledge in a moderate range of areas;
- apply a defined range of skills;
- apply known solutions to a limited range of predictable problems;
- perform a range of tasks where choice between a limited range of options is required;
- assess and record information from varied sources;
- take limited responsibility for own outputs in work and learning.
Certificate III

Characteristics of Learning Outcomes

Breadth, depth and complexity of knowledge and competencies would cover selecting, adapting and transferring skills and knowledge to new environments and providing technical advice and some leadership in resolution of specified problems. This would be applied across a range of roles in a variety of contexts with some complexity in the extent and choice of options available.

Performance of a defined range of skilled operations, usually within a range of broader related activities involving known routines, methods and procedures, where some discretion and judgement is required in the section of equipment, services or contingency measures and within known time constraints.

Applications may involve some responsibility for others. Participation in teams including group or team co-ordination may be involved.

Distinguishing Features of Learning Outcomes

Do the competencies enable an individual with this qualification to:

- demonstrate some relevant theoretical knowledge
- apply a range of well-developed skills
- apply known solutions to a variety of predictable problems
- perform processes that require a range of well-developed skills where some discretion and judgement is required
- interpret available information, using discretion and judgement
- take responsibility for own outputs in work and learning
- take limited responsibility for the output of others.

Certificate IV

Characteristics of Learning Outcomes

Breadth, depth and complexity of knowledge and competencies would cover a broad range of varied activities or application in a wider variety of contexts most of which are complex and non-routine. Leadership and guidance are involved when organising activities of self and others as well as contributing to technical solutions of a non-routine or contingency nature.

Performance of a broad range of skilled applications including the requirement to evaluate and analyse current practices, develop new criteria and procedures for performing current practices and provision of some leadership and guidance to others in the application and planning of the skills. Applications involve responsibility for, and limited organisation of, others.

Distinguishing Features of Learning Outcomes

Do the competencies enable an individual with this qualification to:

- demonstrate understanding of a broad knowledge base incorporating some theoretical concepts
- apply solutions to a defined range of unpredictable problems
- identify and apply skill and knowledge areas to a wide variety of contexts, with depth in some areas
- identify, analyse and evaluate information from a variety of sources
- take responsibility for own outputs in relation to specified quality standards
- take limited responsibility for the quantity and quality of the output of others.
### Diploma

**Characteristics of Learning Outcomes**

Breadth, depth and complexity covering planning and initiation of alternative approaches to skills or knowledge applications across a broad range of technical and/or management requirements, evaluation and co-ordination.

The self directed application of knowledge and skills, with substantial depth in some areas where judgement is required in planning and selecting appropriate equipment, services and techniques for self and others.

Applications involve participation in development of strategic initiatives as well as personal responsibility and autonomy in performing complex technical operations or organising others. It may include participation in teams including teams concerned with planning and evaluation functions. Group or team co-ordination may be involved.

The degree of emphasis on breadth as against depth of knowledge and skills may vary between qualifications granted at this level.

**Distinguishing Features of Learning Outcomes**

Do the competencies or learning outcomes enable an individual with this qualification to:

- demonstrate understanding of a broad knowledge base incorporating theoretical concepts, with substantial depth in some areas
- analyse and plan approaches to technical problems or management requirements
- transfer and apply theoretical concepts and/or technical or creative skills to a range of situations
- evaluate information, using it to forecast for planning or research purposes
- take responsibility for own outputs in relation to broad quantity and quality parameters
- take some responsibility for the achievement of group outcomes.

### Advanced Diploma

**Characteristics of Learning Outcomes**

Breadth, depth and complexity involving analysis, design, planning, execution and evaluation across a range of technical and/or management functions including development of new criteria or applications or knowledge or procedures.

The application of a significant range of fundamental principles and complex techniques across a wide and often unpredictable variety of contexts in relation to either varied or highly specific functions. Contribution to the development of a broad plan, budget or strategy is involved and accountability and responsibility for self and others in achieving the outcomes is involved.

Applications involve significant judgement in planning, design, technical or leadership/guidance functions related to products, services, operations or procedures.

The degree of emphasis on breadth as against depth of knowledge and skills may vary between qualifications granted at this level.

**Distinguishing Features of Learning Outcomes**

Do the competencies or learning outcomes enable an individual with this qualification to:

- demonstrate understanding of specialised knowledge with depth in some areas
- analyse, diagnose, design and execute judgements across a broad range of technical or management functions
- generate ideas through the analysis of information and concepts at an abstract level
- demonstrate a command of wide-ranging, highly specialised technical, creative or conceptual skills
- demonstrate accountability for personal outputs within broad parameters
- demonstrate accountability for personal and group outcomes within broad parameters.
Composition of the CLM Training Package

The Conservation and Land Management Training Package is the framework for vocational education and training for those engaged in conservation and land management work. It supports a wide range of learning pathways. These include institution-based programs, workplace and school-based training, as well as other flexible combinations of workplace and off-the-job training and assessment.

Qualifications within the Conservation and Land Management Training Package can be achieved through a variety of pathways including New Apprenticeships (traineeships).

Below is illustrated the training pathways for qualifications contained within the Conservation and Land Management Training Package.
The Conservation and Land Management Training Package provides a mechanism for the acquisition of qualifications in the Vocational Education and Training (VET) sector. Under the Australian Quality Training Framework (AQTF), competencies within the Conservation and Land Management Training Package form the basis of recognised national qualifications.

**CLM Qualification Titles and Specialisations**

The Rural Training Council of Australia, the national ITAB, has devised a qualifications model that is designed to provide maximum recognition, flexibility and portability for persons employed in the Conservation and Land Management industry.

The six qualifications are:

- Certificate I in Conservation and Land Management
- Certificate II in Conservation and Land Management
- Certificate III in Conservation and Land Management
- Certificate IV in Conservation and Land Management
- Diploma of Conservation and Land Management
- Advanced Diploma of Conservation and Land Management

Within the qualifications from Certificate II through to Diploma of Conservation and Land Management, the CLM competencies are packaged together into combinations that represent meaningful work-related foci for key industry sectors or areas of specialisation in natural resource management. The sector specialisations or occupational streams approved on endorsement of this Training Package include:

- General Land Management
- Conservation Earthworks
- Community Coordination and Facilitation
- Indigenous Land Management
- Lands, Parks and Wildlife
- Natural Area Restoration
- Weed Management
- Vertebrate Pest Management

The mechanism for accommodating these streams within each of these qualifications (Certificate II through to Diploma) has been achieved by developing three lists of units of competency in each stream:

- **Category A list** - these are the key technical work functions that have been designated for each sector specialisation. A limited choice from this list will be required. Units that are compulsory for each qualification are shown in Italics in this group.
- **Category B list** - these are the more generic work functions across a number of industry sectors and a wide choice is available from this list.
- **Category C list** - these include units from the Conservation and Land Management Training Package not listed in Group A or B at that level, and relevant units from other Training Packages.

A qualification for each occupational stream is achieved by selecting units of competency from each of the above lists as set out in Section 13 below.

Competency standards imported from other Training Packages are known as 'cross-industry' competency standards, and the rules attached to these competency standards from their originating Training Package must be adhered to when they are incorporated into training programs or assessments.

**CLM Qualifications Codes**

Each qualification within this Training Package is assigned a separate code for the purpose of listing on the National Training Information Service (NTIS) website [www.ntis.gov.au](http://www.ntis.gov.au). The code is defined...
through four indicators:

- a three letter alpha identifier representing the Training Package title (e.g. RTD),
- a single numeric identifier representing the nominal level (e.g. 2 for a Certificate II),
- a separate numeric identifier to establish the number of qualifications at that level,
- a numeric identifier to distinguish the year of endorsement.

For example, the code for the Certificate II in Conservation and Land Management is RTD20102 where RTD stands for ‘Rural - Conservation’ and is known as the Training Package identifier. The first ‘2’ means it is a Certificate II qualification, ‘01’ indicates it is the first (and only) qualification at this level in the Training Package, and the final ‘02’ represents the year in which the qualification is endorsed.

Issuing Qualifications

Under the agreed arrangements of the Australian Quality Training Framework (AQTF) only Registered Training Organisations (RTOs) can issue qualifications and do so according to the AQTF Standards.

When a qualification is issued by a RTO, there will be an option to include the sector specialisation or occupational stream on the academic transcript, Statement of Attainment and the qualification parchment issued by the RTO.

Statements of Attainment

Individuals who are assessed against some of the competencies set out in the qualification are entitled to receive a Statement of Attainment which recognises partial achievement of a full qualification. The Statement of Attainment can only be issued by an RTO.

When a statement of attainment is issued by a Registered Training Organisation, there will be an option to include the sector specialisation or occupational stream on the academic transcript and Statement of Attainment.

Context of Assessment

Due to the large number of generic units in this Training Package, including imported units and those that are common with agriculture and horticulture, there may be a need to indicate the context in which units of competency or whole qualifications have been assessed.

This can be achieved by adding the industry specialisation to the Statement of Attainment (for incomplete qualification), or on the academic transcript (which lists units of competencies achieved) with the issue of a qualification. This specialisation may also be added to the qualification parchment where requested by a graduate and where approved by the relevant state training authority.

For example, RTD4403A Develop a pest management action plan for a local area may refer to weeds or to pest animals. Where this unit related to weed management and the subsequent qualification conforms with the guidelines for weed management specialisation, the following could be added to the Statement of Attainment, qualification parchment and/or academic transcript:

(Specialisation: Weed Management)

It should be emphasised that this statement does not form part of the formal qualification title, is provided as an option only, and its use and placement must be consistent with the current Training Package Development Handbook.

Rules

There is one rule that can be found detailed in each qualification:

For a Certificate . . . in Conservation and Land Management at least . . .of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.
This is designed to ensure that some 80% of units submitted for a qualification relate to land management contexts so that the integrity of the qualification is maintained.
Qualifications

Prerequisites and Co-requisites

There are no prerequisites and co-requisites listed for any unique conservation and land management units, common units with agriculture and horticulture, nor for any other agriculture and horticulture unit.

However, some units from other Training Packages (such as the Public Safety Training Package) do have prerequisites and co-requisites. These pre- and co-requisites are nominated in the specific unit of competency and are also identified in the table on the following pages. If competency can be demonstrated in the pre and/or co-requisite unit/s then there is no requirement to include these units as part of the qualification.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Pre-requisite / Co-requisite</th>
<th>Co-assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBADM308A Process payroll</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSBADM502A Manage meetings</td>
<td></td>
<td>BSBADM503A Plan and manage conferences</td>
</tr>
<tr>
<td>BSBCMN205A Use business technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSBCMN306A Produce business documents</td>
<td></td>
<td>BSBCMN305A Organise workplace information</td>
</tr>
<tr>
<td>BSBCMN308A Maintain financial records</td>
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<tr>
<td>BSBCMN405A Analyse and present research information</td>
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<tr>
<td>BSBCMN408A Report on financial activity</td>
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<tr>
<td>BSBFLM404A Lead work teams</td>
<td></td>
<td>BSBFLM402A Show leadership in the workplace</td>
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<tr>
<td></td>
<td></td>
<td>BSBFLM403A Manage effective workplace relationships</td>
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<tr>
<td></td>
<td></td>
<td>BSBFLM406A Implement workplace information systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BSBCMN404A Develop teams and individuals</td>
</tr>
<tr>
<td>BSBFLM501A Manage personal work priorities and professional development</td>
<td></td>
<td>BSBFLM502A Provide leadership in the workplace</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BSBFLM506A Manage workplace information system</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BSBFLM511A Develop a workplace learning environment</td>
</tr>
<tr>
<td>BSBFLM510A Facilitate and</td>
<td></td>
<td>BSBFLM502A Provide leadership</td>
</tr>
<tr>
<td>capitalize on change and innovation</td>
<td>in the workplace</td>
<td></td>
</tr>
<tr>
<td>BSBFLM504A Facilitate work teams</td>
<td>BSBFLM505A Manage operational plan</td>
<td></td>
</tr>
<tr>
<td>BSBFLM509A Promote continuous improvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSBHR604A Manage employee relations</td>
<td>BSBHR602A Participate in human resource strategic planning</td>
<td></td>
</tr>
<tr>
<td>BSBMGT504A Manage budgets and financial plans</td>
<td>BSBMGT503A Prepare budgets and financial plans</td>
<td></td>
</tr>
<tr>
<td>BSBMGT503A Prepare budgets and financial plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSBMGT603A Review and develop business plans</td>
<td>BSBMGT604A Manage business operations</td>
<td></td>
</tr>
<tr>
<td>BSBMGT610A Manage environmental management systems</td>
<td>BSBMGT609A Manage risk</td>
<td></td>
</tr>
<tr>
<td>FPIFGM004A Manage seed collection</td>
<td>FPIG21A Collect, analyse and organise information - advanced</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FPIG29A Solve problems in the workplace - basic</td>
<td></td>
</tr>
<tr>
<td>FPIFGM006A Extract seed</td>
<td>FPIOHS1A Follow defined OHS policies and procedures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FPIG22A Plan to undertake a routine task</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FPIG23A Plan a complete activity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FPIG41A Use basic hand held toolsa</td>
<td></td>
</tr>
<tr>
<td>FPIFGM008A Conduct seed collecting operations</td>
<td>FPIOHS1A Follow defined OHS policies and procedures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FPIG23A Plan a complete activity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FPIG41A Use basic hand held tools</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FPIFGM145A Work within environmental constraints</td>
<td></td>
</tr>
<tr>
<td>FPIFGM023A Store and dispatch seed</td>
<td>FPIOHS1A Follow defined OHS policies and procedures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FPIG20A Collect, analyse and organise information - basic</td>
<td></td>
</tr>
</tbody>
</table>
| | FPIG22A Plan to undertake a }
<table>
<thead>
<tr>
<th>Routine Task</th>
<th>Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPIG23A Plan a complete activity</td>
<td>FPIOHS1A Follow defined OHS policies and procedures</td>
</tr>
<tr>
<td></td>
<td>FPIG21A Collect, analyse and organise information - advanced</td>
</tr>
<tr>
<td></td>
<td>FPIG23A Plan a complete activity</td>
</tr>
<tr>
<td></td>
<td>FPIG24A Plan a complex activity</td>
</tr>
<tr>
<td></td>
<td>FPIG26A Work effectively in work groups</td>
</tr>
<tr>
<td></td>
<td>FPIG29A Solve problems in the workplace - advanced</td>
</tr>
<tr>
<td></td>
<td>FPIFGM145A Work within environmental constraints</td>
</tr>
<tr>
<td></td>
<td>FPIFGM147A Read and interpret maps</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>FPIFGM137A Manage road construction and maintenance</td>
<td>FPIFGM139A Operate 4X4 vehicle in off-road conditions</td>
</tr>
<tr>
<td></td>
<td>FPIOHS1A Follow defined OHS policies and procedures</td>
</tr>
<tr>
<td></td>
<td>FPIG20A Collect, analyse and organise information - basic</td>
</tr>
<tr>
<td></td>
<td>FPIG29A Solve problems in the workplace - advanced</td>
</tr>
<tr>
<td></td>
<td>FPIFGM145A Work within environmental constraints</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>FPIFGM147A Read and interpret maps</td>
<td>FPIOHS1A Follow defined OHS policies and procedures</td>
</tr>
<tr>
<td></td>
<td>FPIG20A Collect, analyse and organise information - basic</td>
</tr>
<tr>
<td></td>
<td>FPIG22A Plan to undertake a routine task</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>MNMOCC638A Undertake direct seeding</td>
<td>MNMCCC001A Communicate in the workplace</td>
</tr>
<tr>
<td></td>
<td>MNMCCC002A Work safely</td>
</tr>
<tr>
<td></td>
<td>MNMCCC003A Plan and organise individual work</td>
</tr>
<tr>
<td></td>
<td>MNMCCC004A Contribute to quality work outcomes</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNQ.OP/20.A</td>
<td>Conduct grader operations</td>
</tr>
<tr>
<td>MNQ.OP/21.A</td>
<td>Conduct front end loader operations</td>
</tr>
<tr>
<td>MNQ.OP/22.A</td>
<td>Conduct shovel / excavator operations</td>
</tr>
<tr>
<td>MNQ.OP/23.A</td>
<td>Conduct haul truck operations</td>
</tr>
<tr>
<td>MNQ.OP/24.A</td>
<td>Conduct dozer operations</td>
</tr>
<tr>
<td>MNQ.OP/25.A</td>
<td>Conduct scraper operations</td>
</tr>
<tr>
<td>PUAFIR204A</td>
<td>Respond to wildfire</td>
</tr>
<tr>
<td>PUAFIR303A</td>
<td>Suppress wildfire</td>
</tr>
<tr>
<td>PUAFIR601A</td>
<td>Develop and administer agency policy, procedures and practices</td>
</tr>
<tr>
<td>SFISHIP206A</td>
<td>Operate a small vessel</td>
</tr>
<tr>
<td>SFISHIP207A</td>
<td>Operate and maintain outboard motors after</td>
</tr>
<tr>
<td>SFISHIP212A</td>
<td>Take emergency action on board a vessel</td>
</tr>
<tr>
<td>SRXTEM004A</td>
<td>Deal with conflict</td>
</tr>
<tr>
<td>SRXTEM003A</td>
<td>Work autonomously</td>
</tr>
<tr>
<td>THTFAT01B</td>
<td>Provide on-site information and assistance</td>
</tr>
<tr>
<td>THTFTG01B</td>
<td>Work as a guide</td>
</tr>
<tr>
<td>THTFTG07B</td>
<td>Research and share general information on Australian indigenous cultures</td>
</tr>
<tr>
<td>THHCOR01B</td>
<td>Work with colleagues and customers</td>
</tr>
<tr>
<td>THHGCS01B</td>
<td>Develop and update local knowledge</td>
</tr>
<tr>
<td>THTTCO01B</td>
<td>Develop and update tourism knowledge</td>
</tr>
<tr>
<td>THTFTG08B</td>
<td>Interpret aspects of local Australian indigenous culture</td>
</tr>
<tr>
<td>THTFTG06B</td>
<td>Prepare and present interpretive tour commentaries and activities</td>
</tr>
</tbody>
</table>
Interpret aspects of local Australian indigenous culture

Research and share general information on Australian indigenous cultures

Prepare and present interpretive tour commentaries and activities

Prepare specialised interpretive content (cultural and heritage environments)

Prepare and present interpretive tour commentaries and activities

Prepare and present interpretive tour commentaries and activities

Prepare and present interpretive tour commentaries and activities

Develop and maintain the general knowledge required by guides

Prepare specialised interpretive content (flora, fauna and landscape)

Prepare specialised interpretive content (marine environments)

Prepare specialised interpretive content (cultural and heritage environments)

Plan and develop interpretive activities

Plan and develop ecologically sustainable tourism operations

Create and implement strategic product development initiatives

Plan and develop culturally appropriate tourism operations

* for further information about related units for units within other nationally endorsed Training Packages, please contact the developer of that particular Training Package.

Entry Points to Conservation and Land Management Qualifications

As these qualifications do not represent training pathways or delivery structures, they do not specify entry points to training. Entry points will be outlined as part of an RTOs training and assessment policy.

New Apprenticeships and CLM Qualifications

New Apprenticeships (Traineeships and Apprenticeships) provide one of the approaches for achieving qualifications in the Conservation and Land Management Training Package. Other approaches include direct assessment against the competencies for people with relevant workforce experience, workplace training and assessment, and/or off-the-job training and assessment by an RTO.

All qualifications that have been identified in this Training Package are potentially accessible as a New Apprenticeship. However, it is anticipated that most New Apprenticeships will be based around Certificate II and Certificate III outcomes.

The capacity to establish a New Apprenticeship for any of the qualifications will depend on industry demand, resources available at the State or Territory level and any award requirements.
Where a New Apprenticeship structure is established for a Conservation and Land Management qualification the following considerations must be met:

- All New Apprenticeship arrangements must reflect the qualification requirements and packaging arrangements for the relevant qualification as defined in this Training Package. This includes the content of the training agreement and training program.
- All New Apprenticeship arrangements must reflect the requirements for assessment as set out in the Assessment Guidelines of the Conservation and Land Management Training Package.
- All assessment for the purpose of issuing a qualification through a New Apprenticeship must be against the specified Competency Standards and in compliance with the packaging rules as set out for the relevant qualification.
- Any customisation of the qualification for a New Apprenticeship program must reflect the customisation advice set out in this guide.
- Estimation of time to complete a New Apprenticeship in Conservation and Land Management must be negotiated with the relevant State/Territory Training Authority (STA).

**Licensing Arrangements**

There are no licensing arrangements relating to CLM qualifications. However, some individual units of competency may be subject to licensing arrangements before training is commenced or before undertaking related work in the industry. Other units may require licences for those responsible for delivery and assessment. Units where licensing arrangements may be relevant include those dealing with:

- Operation of vehicles, machinery and equipment such as chainsaws, motor vehicles, tractors, forklifts and earthmoving machinery.
- Driving or transporting of machinery and equipment on public roads.
- Firearms.
- Chemical use.
- Access to and activities on private or protected lands.
- Management activities related to particular animal and plant species.

Refer to the individual units for further details on these matters and to relevant State and/or Territory and/or Commonwealth legislation.

**VET in Schools**

There are no restrictions on the delivery or assessment of competency in schools. The Certificate 1 in Conservation and Land Management has been designed as a broad-based general qualification that will provide easy transition to Level 2 training in more specialised areas in conservation and land management, agriculture and horticulture. It is expected that VET in Schools Programs will focus on delivery and assessment at Level 1 in the first instance, with eventual bridging into Level 2 specialisations.

**Details of Qualification Packaging**

The packaging rules for Conservation and Land Management qualifications are presented below.

The qualification packaging for general land management and specialisations is listed in the following order:

- General Land Management
- Conservation Earthworks
- Community Coordination and Facilitation
- Indigenous Land Management
- Lands, Parks and Wildlife
- Natural Area Restoration
- Weed Management
- Vertebrate Pest Management
RTD10102 Certificate I in Conservation and Land Management

A total of 6 units of competency must be completed.

- Complete the compulsory unit from Group A below.
- Select 4 additional units from GROUP B below.
- Select 1 additional unit from GROUP B or C below.

**GROUP A (* compulsory units)**

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC1801A</td>
<td>Prepare for work*</td>
</tr>
</tbody>
</table>

**GROUP B**

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC1006A</td>
<td>Support nursery work</td>
</tr>
<tr>
<td>RTC1201A</td>
<td>Maintain the workplace</td>
</tr>
<tr>
<td>RTC1202A</td>
<td>Support landscape work</td>
</tr>
<tr>
<td>RTC1301A</td>
<td>Operate basic machinery and equipment</td>
</tr>
<tr>
<td>RTC1302A</td>
<td>Assist with routine maintenance of machinery and equipment</td>
</tr>
<tr>
<td>RTD1501A</td>
<td>Support natural area conservation</td>
</tr>
<tr>
<td>RTC1701A</td>
<td>Follow basic chemical safety rules</td>
</tr>
</tbody>
</table>

**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 1 & 2. These units must be relevant to work undertaken in Conservation and Land Management.

**QUALIFICATION RULES**

For a Certificate I in Conservation and Land Management at least 5 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.
RTD20102 Certificate II in Conservation and Land Management

A total of 15 units of competency must be completed.

- Complete the 5 compulsory units in Group A below.
- Select 8 additional units from GROUP B below.
- Select 2 additional units from GROUP B and/or C below.

**GROUP A (* compulsory units)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC2701A</td>
<td>Follow OHS procedures*</td>
</tr>
<tr>
<td>RTC2702A</td>
<td>Observe environmental work practices*</td>
</tr>
<tr>
<td>RTC2704A</td>
<td>Provide basic first aid*</td>
</tr>
<tr>
<td>RTC2705A</td>
<td>Work effectively in the industry*</td>
</tr>
<tr>
<td>RTC2801A</td>
<td>Participate in workplace communications*</td>
</tr>
</tbody>
</table>

**GROUP B**

**WORKING WITH PLANTS**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD2004A</td>
<td>Collect, prepare and preserve plant specimens</td>
</tr>
<tr>
<td>RTC2005A</td>
<td>Fell small trees</td>
</tr>
<tr>
<td>RTC2012A</td>
<td>Plant trees and shrubs</td>
</tr>
<tr>
<td>RTC2016A</td>
<td>Recognise plants</td>
</tr>
<tr>
<td>RTD2022A</td>
<td>Carry out natural area restoration works</td>
</tr>
<tr>
<td>RTC2026A</td>
<td>Undertake propagation activities</td>
</tr>
<tr>
<td>FPIFGM023A</td>
<td>Store and dispatch seed</td>
</tr>
<tr>
<td>FPIFGM162A</td>
<td>Collect, treat and store seed</td>
</tr>
<tr>
<td>MNMOCC638A</td>
<td>Undertake direct seeding</td>
</tr>
</tbody>
</table>

**WORKING WITH ANIMALS**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD2101A</td>
<td>Apply animal trapping techniques</td>
</tr>
<tr>
<td>RTD2116A</td>
<td>Muster pest animals</td>
</tr>
<tr>
<td>RTD2125A</td>
<td>Use firearms to humanely destroy animals</td>
</tr>
<tr>
<td>RTD2126A</td>
<td>Recognise animals</td>
</tr>
</tbody>
</table>

**CONSTRUCTION AND MAINTENANCE**
### Conduct erosion and sediment control activities
- **RTC2202A**

### Conduct visual inspection of park facilities
- **RTC2203A**

### Install aggregate paths
- **RTD2206A**

### Install, maintain and repair fencing
- **RTC2209A**

### Maintain properties and structures
- **RTC2210A**

### MACHINERY AND EQUIPMENT
- **RTC2301A** - Undertake operational maintenance of machinery
- **RTC2304A** - Operate and maintain chainsaws
- **RTC2306A** - Operate vehicles
- **RTC2307A** - Operate machinery and equipment
- **RTC2309A** - Operate tractors
- **RTD2312A** - Inspect machinery for plant, animal and soil material
- **RTD2313A** - Clean machinery of plant, animal and soil material

Select a maximum of two (2) of the following: (# see below)

<table>
<thead>
<tr>
<th>Code</th>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNQ.OP/20.A</td>
<td>Conduct grader operations #</td>
</tr>
<tr>
<td>MNQ.OP/21.A</td>
<td>Conduct front end loader operations #</td>
</tr>
<tr>
<td>MNQ.OP/22.A</td>
<td>Conduct shovel/excavator operations #</td>
</tr>
<tr>
<td>MNQ.OP/23.A</td>
<td>Conduct haul truck operations #</td>
</tr>
<tr>
<td>MNQ.OP/24.A</td>
<td>Conduct dozer operations #</td>
</tr>
<tr>
<td>MNQ.OP/25.A</td>
<td>Conduct scraper operations #</td>
</tr>
<tr>
<td>FPIFGM139A</td>
<td>Operate 4x4 vehicle in off-road conditions</td>
</tr>
<tr>
<td>SFISHIP206A</td>
<td>Operate a small vessel</td>
</tr>
</tbody>
</table>

### PESTS AND DISEASES
- **RTC2401A** - Treat weeds
- **RTD2402A** - Clear features that harbour pest animals
- **RTD2403A** - Conduct vertebrate pest activities from aircraft
- **RTC2404A** - Treat plant pests, diseases and disorders
- **RTD2405A** - Tag and locate judas animals

### RESOURCE MANAGEMENT
RTD2501A  Maintain cultural places
RTD2502A  Maintain wildlife habitat refuges
FPIL2191516A  Reduce wildfire hazards
PUAFIR204A  Respond to wildfire

HEALTH AND SAFETY
RTD2703A  Operate in isolated and remote situations
RTC2706A  Apply chemicals under supervision

WORKING WITH PEOPLE
RTD2802A  Record information about country
RTD2803A  Observe and report on plants and/or animals
THTFAT01B  Provide on-site information and assistance
THTFTG01B  Work as a guide

ADMINISTRATION AND BUSINESS
BSBCM205A  Use business technology
BSBCM206A  Process and maintain workplace information
PUALAW001A  Protect and preserve incident scene

GROUP C
This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 1, 2 & 3. These units must be relevant to work undertaken in Conservation and Land Management.

QUALIFICATION RULES
For a Certificate II in Conservation and Land Management at least 12 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

# For this qualification a maximum of 2 units from the range MNQ.OP/20.A - MNQ.OP/25.A is allowed.

Certificate II in Conservation and Land Management (specialising in conservation earthworks)

A total of 15 units of competency must be completed.

- Select 9 units from Group A below (including the 5 designated compulsory units).
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.
**GROUP A (* compulsory units)*

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC2701A</td>
<td>Follow OHS procedures*</td>
</tr>
<tr>
<td>RTC2702A</td>
<td>Observe environmental work practices*</td>
</tr>
<tr>
<td>RTC2704A</td>
<td>Provide basic first aid*</td>
</tr>
<tr>
<td>RTC2705A</td>
<td>Work effectively in the industry*</td>
</tr>
<tr>
<td>RTC2801A</td>
<td>Participate in workplace communications*</td>
</tr>
<tr>
<td>RTD2022A</td>
<td>Carry out natural area restoration works</td>
</tr>
<tr>
<td>RTD2202A</td>
<td>Conduct erosion and sediment control activities</td>
</tr>
<tr>
<td>RTC2209A</td>
<td>Install, maintain and repair fencing</td>
</tr>
<tr>
<td>RTC2301A</td>
<td>Undertake operational maintenance of machinery</td>
</tr>
<tr>
<td>RTD2313A</td>
<td>Clean machinery of plant, animal and soil material</td>
</tr>
</tbody>
</table>

**Machinery operations - select a maximum of two (2) from the following:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MNQ.OP/20.A</td>
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<td>MNQ.OP/23.A</td>
<td>Conduct haul truck operations #</td>
</tr>
<tr>
<td>MNQ.OP/24.A</td>
<td>Conduct dozer operations #</td>
</tr>
<tr>
<td>MNQ.OP/25.A</td>
<td>Conduct scraper operations #</td>
</tr>
</tbody>
</table>

**GROUP B**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPIFGM139A</td>
<td>Operate 4x4 vehicle in off-road conditions</td>
</tr>
<tr>
<td>PUAFIR204A</td>
<td>Respond to wildfire</td>
</tr>
<tr>
<td>RTC2304A</td>
<td>Operate and maintain chainsaws</td>
</tr>
<tr>
<td>RTC2306A</td>
<td>Operate vehicles</td>
</tr>
<tr>
<td>RTC2309A</td>
<td>Operate tractors</td>
</tr>
<tr>
<td>RTD2703A</td>
<td>Operate in isolated and remote situations</td>
</tr>
<tr>
<td>RTC2706A</td>
<td>Apply chemicals under supervision</td>
</tr>
</tbody>
</table>

**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 1, 2 & 3. These units must be relevant to work undertaken in Conservation and Land Management.
QUALIFICATION RULES

For a Certificate II in Conservation and Land Management at least 12 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

# For this qualification specialising in Conservation Earthworks, a maximum of two (2) units from the range MNQ.OP/20.A - MNQ.OP/25.A is allowed.

Certificate II in Conservation and Land Management (specialising in Indigenous land management)

A total of 15 units of competency must be completed.

- Select 9 units from Group A below (including the 5 designated compulsory units).
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

GROUP A (* compulsory units)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC2701A</td>
<td>Follow OHS procedures*</td>
</tr>
<tr>
<td>RTC2702A</td>
<td>Observe environmental work practices*</td>
</tr>
<tr>
<td>RTC2704A</td>
<td>Provide basic first aid*</td>
</tr>
<tr>
<td>RTC2705A</td>
<td>Work effectively in the industry*</td>
</tr>
<tr>
<td>RTC2801A</td>
<td>Participate in workplace communications*</td>
</tr>
<tr>
<td>FPIFGM162A</td>
<td>Collect, treat and store seed</td>
</tr>
<tr>
<td>RTC2012A</td>
<td>Plant trees and shrubs</td>
</tr>
<tr>
<td>RTC2016A</td>
<td>Recognise plants</td>
</tr>
<tr>
<td>RTD2022A</td>
<td>Carry out natural area restoration works</td>
</tr>
<tr>
<td>RTD2126A</td>
<td>Recognise animals</td>
</tr>
<tr>
<td>RTC2209A</td>
<td>Install, maintain and repair fencing</td>
</tr>
<tr>
<td>RTC2210A</td>
<td>Maintain properties and structures</td>
</tr>
<tr>
<td>RTC2301A</td>
<td>Undertake operational maintenance of machinery</td>
</tr>
<tr>
<td>RTC2307A</td>
<td>Operate machinery and equipment</td>
</tr>
<tr>
<td>RTD2501A</td>
<td>Maintain cultural places</td>
</tr>
<tr>
<td>RTD2802A</td>
<td>Record information about country</td>
</tr>
</tbody>
</table>

GROUP B
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPIFGM139A</td>
<td>Operate 4x4 vehicle in off-road conditions</td>
</tr>
<tr>
<td>RTD2101A</td>
<td>Apply animal trapping techniques</td>
</tr>
<tr>
<td>RTD2206A</td>
<td>Install aggregate paths</td>
</tr>
<tr>
<td>RTC2304A</td>
<td>Operate and maintain chainsaws</td>
</tr>
<tr>
<td>RTC2306A</td>
<td>Operate vehicles</td>
</tr>
<tr>
<td>RTC2309A</td>
<td>Operate tractors</td>
</tr>
<tr>
<td>RTC2401A</td>
<td>Treat weeds</td>
</tr>
<tr>
<td>RTD2703A</td>
<td>Operate in isolated and remote situations</td>
</tr>
<tr>
<td>RTC2706A</td>
<td>Apply chemicals under supervision</td>
</tr>
<tr>
<td>RTD2803A</td>
<td>Observe and report on plants and/or animals</td>
</tr>
<tr>
<td>SFISHIP206A</td>
<td>Operate a small vessel</td>
</tr>
<tr>
<td>THTFAT01B</td>
<td>Provide on site information and assistance</td>
</tr>
<tr>
<td>THTFTG01B</td>
<td>Work as a guide</td>
</tr>
</tbody>
</table>

**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 1, 2 & 3. These units must be relevant to work undertaken in Conservation and Land Management.

**QUALIFICATION RULES**

For a Certificate II in Conservation and Land Management at least 12 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

**Certificate II in Conservation and Land Management (specialising in lands, parks and wildlife)**

A total of 15 units of competency must be completed.

- Select 9 units from Group A below (including the 5 designated compulsory units).
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

**GROUP A (** compulsory units **)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC2701A</td>
<td>Follow OHS procedures*</td>
</tr>
<tr>
<td>RTC2702A</td>
<td>Observe environmental work practices*</td>
</tr>
<tr>
<td>RTC2704A</td>
<td>Provide basic first aid*</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>RTC2705A</td>
<td>Work effectively in the industry*</td>
</tr>
<tr>
<td>RTC2801A</td>
<td>Participate in workplace communications*</td>
</tr>
<tr>
<td>FPIFGM139A</td>
<td>Operate 4x4 vehicle in off-road conditions</td>
</tr>
<tr>
<td>RTD2022A</td>
<td>Carry out natural area restoration works</td>
</tr>
<tr>
<td>RTC2203A</td>
<td>Conduct visual inspection of park facilities</td>
</tr>
<tr>
<td>RTC2210A</td>
<td>Maintain properties and structures</td>
</tr>
<tr>
<td>RTC2306A</td>
<td>Operate vehicles</td>
</tr>
<tr>
<td>RTC2401A</td>
<td>Treat weeds</td>
</tr>
<tr>
<td>RTD2703A</td>
<td>Operate in isolated and remote situations</td>
</tr>
</tbody>
</table>

**GROUP B**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPIL2191516A</td>
<td>Reduce wildfire hazards</td>
</tr>
<tr>
<td>PUAFIR204A</td>
<td>Respond to wildfire</td>
</tr>
<tr>
<td>PUALAW001A</td>
<td>Protect and preserve incident scene</td>
</tr>
<tr>
<td>RTC2012A</td>
<td>Plant trees and shrubs</td>
</tr>
<tr>
<td>RTC2016A</td>
<td>Recognise plants</td>
</tr>
<tr>
<td>RTD2126A</td>
<td>Recognise animals</td>
</tr>
<tr>
<td>RTD2206A</td>
<td>Install aggregate paths</td>
</tr>
<tr>
<td>RTC2209A</td>
<td>Install, maintain and repair fencing</td>
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<td>RTC2301A</td>
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<td>Operate tractors</td>
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<td>Treat plant pests, diseases and disorders</td>
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</tr>
<tr>
<td>RTC2706A</td>
<td>Apply chemicals under supervision</td>
</tr>
<tr>
<td>RTD2803A</td>
<td>Observe and report on plants and/or animals</td>
</tr>
<tr>
<td>SFISHIP206A</td>
<td>Operate a small vessel</td>
</tr>
<tr>
<td>THTFAT01B</td>
<td>Provide on-site information and assistance</td>
</tr>
<tr>
<td>THTFTG01B</td>
<td>Work as a guide</td>
</tr>
</tbody>
</table>
GROUP C

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 1, 2 & 3. These units must be relevant to work undertaken in Conservation and Land Management.

QUALIFICATION RULES

For a Certificate II in Conservation and Land Management at least 12 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

Certificate II in Conservation and Land Management (specialising in natural area restoration & management)

A total of 15 units of competency must be completed.

- Select 9 units from Group A below (including the 5 designated compulsory units).
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

GROUP A (* compulsory units)

<table>
<thead>
<tr>
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<tbody>
<tr>
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</tr>
<tr>
<td>RTC2702A</td>
<td>Observe environmental work practices*</td>
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<tr>
<td>RTC2704A</td>
<td>Provide basic first aid*</td>
</tr>
<tr>
<td>RTC2705A</td>
<td>Work effectively in the industry*</td>
</tr>
<tr>
<td>RTC2801A</td>
<td>Participate in workplace communications*</td>
</tr>
<tr>
<td>RTC2012A</td>
<td>Plant trees and shrubs</td>
</tr>
<tr>
<td>RTC2016A</td>
<td>Recognise plants</td>
</tr>
<tr>
<td>RTD2022A</td>
<td>Carry out natural area restoration works</td>
</tr>
<tr>
<td>RTD2202A</td>
<td>Conduct erosion and sediment control activities</td>
</tr>
<tr>
<td>RTC2209A</td>
<td>Install, maintain and repair fencing</td>
</tr>
<tr>
<td>RTC2306A</td>
<td>Operate vehicles</td>
</tr>
<tr>
<td>RTC2401A</td>
<td>Treat weeds</td>
</tr>
<tr>
<td>RTC2706A</td>
<td>Apply chemicals under supervision</td>
</tr>
<tr>
<td>RTD2803A</td>
<td>Observe and report on plants and/or animals</td>
</tr>
</tbody>
</table>

GROUP B
<table>
<thead>
<tr>
<th>Unit Code</th>
<th>Unit Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBCM205A</td>
<td>Use business technology</td>
</tr>
<tr>
<td>FPIFGM023A</td>
<td>Store and dispatch seed</td>
</tr>
<tr>
<td>FPIFGM162A</td>
<td>Collect, treat and store seed</td>
</tr>
<tr>
<td>FPIIL2191516A</td>
<td>Reduce wildfire hazards</td>
</tr>
<tr>
<td>MNMCC638A</td>
<td>Undertake direct seeding</td>
</tr>
<tr>
<td>RTC2307A</td>
<td>Operate machinery and equipment</td>
</tr>
<tr>
<td>RTD2004A</td>
<td>Collect, prepare and preserve plant specimens</td>
</tr>
<tr>
<td>RTC2005A</td>
<td>Fell small trees</td>
</tr>
<tr>
<td>RTC2026A</td>
<td>Undertake propagation activities</td>
</tr>
<tr>
<td>RTD2101A</td>
<td>Apply animal trapping techniques</td>
</tr>
<tr>
<td>RTD2206A</td>
<td>Install aggregate paths</td>
</tr>
<tr>
<td>RTC2210A</td>
<td>Maintain properties and structures</td>
</tr>
<tr>
<td>RTC2301A</td>
<td>Undertake operational maintenance of machinery</td>
</tr>
<tr>
<td>RTC2304A</td>
<td>Operate and maintain chainsaws</td>
</tr>
<tr>
<td>RTC2309A</td>
<td>Operate tractors</td>
</tr>
<tr>
<td>RTD2313A</td>
<td>Clean machinery of plant, animal and soil material</td>
</tr>
<tr>
<td>RTD2402A</td>
<td>Clear features that harbour pest animals</td>
</tr>
<tr>
<td>RTC2404A</td>
<td>Treat plant pests, diseases and disorders</td>
</tr>
</tbody>
</table>

**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 1, 2 & 3. These units must be relevant to work undertaken in Conservation and Land Management.

**QUALIFICATION RULES**

For a Certificate II in Conservation and Land Management at least 12 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

**Certificate II in Conservation and Land Management (specialising in weed management)**

A total of 15 units of competency must be completed.

- Select 9 units from Group A below (including the 6 designated compulsory units).

- Select 4 additional units from Group A and/or B below.
• Select 2 additional units from Group A, B and/or C below.

### GROUP A (* compulsory units)

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC2701A</td>
<td>Follow OHS procedures*</td>
</tr>
<tr>
<td>RTC2702A</td>
<td>Observe environmental work practices*</td>
</tr>
<tr>
<td>RTC2704A</td>
<td>Provide basic first aid*</td>
</tr>
<tr>
<td>RTC2705A</td>
<td>Work effectively in the industry*</td>
</tr>
<tr>
<td>RTC2801A</td>
<td>Participate in workplace communications*</td>
</tr>
<tr>
<td>RTD2004A</td>
<td>Collect, prepare and preserve plant specimens</td>
</tr>
<tr>
<td>RTC2306A</td>
<td>Operate vehicles</td>
</tr>
<tr>
<td>RTC2307A</td>
<td>Operate machinery and equipment</td>
</tr>
<tr>
<td>RTD2312A</td>
<td>Inspect machinery for plant, animal and soil material</td>
</tr>
<tr>
<td>RTD2313A</td>
<td>Clean machinery of plant, animal and soil material</td>
</tr>
<tr>
<td>RTC2401A</td>
<td>Treat weeds*</td>
</tr>
<tr>
<td>RTC2706A</td>
<td>Apply chemicals under supervision</td>
</tr>
</tbody>
</table>

### GROUP B

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBCMN205A</td>
<td>Use business technology</td>
</tr>
<tr>
<td>FPIFGM139A</td>
<td>Operate 4x4 vehicle in off-road conditions</td>
</tr>
<tr>
<td>RTD2022A</td>
<td>Carry out natural area restoration works</td>
</tr>
<tr>
<td>RTC2301A</td>
<td>Undertake operational maintenance of machinery</td>
</tr>
<tr>
<td>RTC2304A</td>
<td>Operate and maintain chainsaws</td>
</tr>
<tr>
<td>RTC2309A</td>
<td>Operate tractors</td>
</tr>
<tr>
<td>RTD2703A</td>
<td>Operate in isolated and remote situations</td>
</tr>
<tr>
<td>RTD2803A</td>
<td>Observe and report on plants and/or animals</td>
</tr>
</tbody>
</table>

### GROUP C

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 1, 2 & 3. These units must be relevant to work undertaken in Conservation and Land Management.

### QUALIFICATION RULES

For a Certificate II in Conservation and Land Management at least 12 of the units of competency presented for this qualification must relate to conservation and land management work procedures,
activities or contexts.

Certificate II in Conservation and Land Management (specialising in vertebrate pest management)

A total of 15 units of competency must be completed.

- Select 9 units from Group A below (including the 5 designated compulsory units).
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

<table>
<thead>
<tr>
<th>GROUP A (* compulsory units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC2701A</td>
</tr>
<tr>
<td>RTC2702A</td>
</tr>
<tr>
<td>RTC2704A</td>
</tr>
<tr>
<td>RTC2705A</td>
</tr>
<tr>
<td>RTC2801A</td>
</tr>
<tr>
<td>RTD2101A</td>
</tr>
<tr>
<td>RTD2116A</td>
</tr>
<tr>
<td>RTD2125A</td>
</tr>
<tr>
<td>RTC2209A</td>
</tr>
<tr>
<td>RTD2402A</td>
</tr>
<tr>
<td>RTD2403A</td>
</tr>
<tr>
<td>RTD2405A</td>
</tr>
<tr>
<td>RTC2706A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GROUP B</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBCM205A</td>
</tr>
<tr>
<td>FPIFGM139A</td>
</tr>
<tr>
<td>RTC2301A</td>
</tr>
<tr>
<td>RTC2307A</td>
</tr>
<tr>
<td>RTD2502A</td>
</tr>
<tr>
<td>RTD2703A</td>
</tr>
<tr>
<td>RTD2803A</td>
</tr>
</tbody>
</table>
### GROUP C

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 1, 2 & 3. These units must be relevant to work undertaken in Conservation and Land Management.

### QUALIFICATION RULES

For a Certificate II in Conservation and Land Management at least 12 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.
RTD30102 Certificate III in Conservation and Land Management

A total of 15 units of competency must be completed.

- Complete the 5 compulsory units from Group A below.
- Select 8 additional units from GROUP B below.
- Select 2 additional units from GROUP B and/or C below.

### GROUP A (* compulsory units)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC2701A</td>
<td>Follow OHS procedures*</td>
</tr>
<tr>
<td>RTC2702A</td>
<td>Observe environmental work practices*</td>
</tr>
<tr>
<td>RTC2705A</td>
<td>Work effectively in the industry*</td>
</tr>
<tr>
<td>RTC2801A</td>
<td>Participate in workplace communications*</td>
</tr>
<tr>
<td>RTC3701A</td>
<td>Respond to emergencies*</td>
</tr>
</tbody>
</table>

### GROUP B

#### WORKING WITH PLANTS

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC3016A</td>
<td>Provide information on plants and their culture</td>
</tr>
<tr>
<td>RTD3034A</td>
<td>Implement revegetation works</td>
</tr>
<tr>
<td>FPIFGM006A</td>
<td>Extract seed</td>
</tr>
<tr>
<td>FPIFGM008A</td>
<td>Conduct seed collecting operations</td>
</tr>
</tbody>
</table>

#### WORKING WITH ANIMALS

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD3125A</td>
<td>Respond to wildlife emergencies</td>
</tr>
<tr>
<td>RTD3132A</td>
<td>Survey pest animals</td>
</tr>
</tbody>
</table>

#### CONSTRUCTION AND MAINTENANCE

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC3201A</td>
<td>Conduct operational inspection of park facilities</td>
</tr>
<tr>
<td>RTD3202A</td>
<td>Construct access tracks</td>
</tr>
<tr>
<td>RTD3205A</td>
<td>Construct conservation earthworks</td>
</tr>
<tr>
<td>RTC3206A</td>
<td>Erect timber structures and features</td>
</tr>
<tr>
<td>RTC3209A</td>
<td>Plan and construct conventional fencing</td>
</tr>
<tr>
<td>RTC3211A</td>
<td>Implement a maintenance program for an aquatic environment</td>
</tr>
<tr>
<td>RTD3212A</td>
<td>Implement erosion and sediment control measures</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC3213A</td>
<td>Implement property improvement, construction and repair</td>
</tr>
<tr>
<td>RTC3218A</td>
<td>Undertake a site assessment</td>
</tr>
</tbody>
</table>

**MACHINERY AND EQUIPMENT**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC3310A</td>
<td>Operate specialised machinery and equipment</td>
</tr>
<tr>
<td>RTC3311A</td>
<td>Perform specialised machinery maintenance</td>
</tr>
<tr>
<td>RTD3315A</td>
<td>Transport machinery</td>
</tr>
</tbody>
</table>

**PESTS AND DISEASES**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC3401A</td>
<td>Control weeds</td>
</tr>
<tr>
<td>RTC3404A</td>
<td>Control plant pests, diseases and disorders</td>
</tr>
<tr>
<td>RTD3405A</td>
<td>Monitor and evaluate the local pest management action plan</td>
</tr>
</tbody>
</table>

**RESOURCE MANAGEMENT**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD3501A</td>
<td>Assist in the implementation of legislation</td>
</tr>
<tr>
<td>RTD3502A</td>
<td>Carry out inspection of designated area</td>
</tr>
<tr>
<td>RTD3505A</td>
<td>Maintain natural areas</td>
</tr>
<tr>
<td>RTD3507A</td>
<td>Undertake sampling and testing of water</td>
</tr>
<tr>
<td>RTD3508A</td>
<td>Perform diving for scientific purposes</td>
</tr>
<tr>
<td>FPIFGM147A</td>
<td>Read and interpret maps</td>
</tr>
<tr>
<td>FPINCR034A</td>
<td>Utilise burning for natural and cultural resource management</td>
</tr>
<tr>
<td>PUAFIR303A</td>
<td>Suppress wildfire</td>
</tr>
</tbody>
</table>

**HEALTH AND SAFETY**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD3509A</td>
<td>Collect and preserve biological samples</td>
</tr>
<tr>
<td>RTD3703A</td>
<td>Respond to rescue incidents</td>
</tr>
<tr>
<td>RTC3704A</td>
<td>Prepare and apply chemicals</td>
</tr>
<tr>
<td>RTC3705A</td>
<td>Transport, handle and store chemicals</td>
</tr>
<tr>
<td>RTD3706A</td>
<td>Maintain biological cultures</td>
</tr>
<tr>
<td>RTD3707A</td>
<td>Release biological agents</td>
</tr>
<tr>
<td>RTD3709A</td>
<td>Handle and store explosives</td>
</tr>
<tr>
<td>RTD3710A</td>
<td>Identify and select explosive products</td>
</tr>
<tr>
<td>RTD3711A</td>
<td>Prepare and use explosives</td>
</tr>
</tbody>
</table>
### WORKING WITH PEOPLE

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD3802A</td>
<td>Provide appropriate information on cultural knowledge</td>
</tr>
<tr>
<td>RTD3804A</td>
<td>Supervise park visitor activities</td>
</tr>
<tr>
<td>RTC3805A</td>
<td>Coordinate work site activities</td>
</tr>
<tr>
<td>RTD3811A</td>
<td>Coordinate board/committee elections</td>
</tr>
<tr>
<td>RTD3812A</td>
<td>Coordinate fund-raising activities</td>
</tr>
<tr>
<td>RTD3813A</td>
<td>Coordinate social events to support group purposes</td>
</tr>
<tr>
<td>RTD3814A</td>
<td>Present proposed courses of action to meeting</td>
</tr>
<tr>
<td>RTD3815A</td>
<td>Represent group at functions</td>
</tr>
<tr>
<td>RTD3816A</td>
<td>Service committees</td>
</tr>
<tr>
<td>RTD3817A</td>
<td>Propose appropriate uses of traditional customs</td>
</tr>
<tr>
<td>SRXTEM004A</td>
<td>Deal with conflict</td>
</tr>
<tr>
<td>THTFTG07B</td>
<td>Research and share general information on Australian indigenous cultures</td>
</tr>
<tr>
<td>THTFTG08B</td>
<td>Interpret aspects of local Australian indigenous cultures</td>
</tr>
<tr>
<td>THTFTG14A</td>
<td>Prepare specialised interpretive content (cultural and heritage environments)</td>
</tr>
</tbody>
</table>

### ADMINISTRATION AND BUSINESS

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD3903A</td>
<td>Work in an Indigenous community or organisation</td>
</tr>
<tr>
<td>BSBADM308A</td>
<td>Process payroll</td>
</tr>
<tr>
<td>BSBCMN306A</td>
<td>Produce business documents</td>
</tr>
<tr>
<td>BSBCMN308A</td>
<td>Maintain financial records</td>
</tr>
<tr>
<td>MEM16.1BA</td>
<td>Give formal presentations and take part in meetings</td>
</tr>
</tbody>
</table>

### GROUP C

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 2, 3 & 4. These units must be relevant to work undertaken in Conservation and Land Management.

### QUALIFICATION RULES

For a Certificate III in Conservation and Land Management at least 12 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

#### Certificate III in Conservation and Land Management (specialising in conservation earthworks)

A total of 15 units of competency must be completed.
• Select 9 units from Group A below (including the 5 designated compulsory units).
• Select 4 additional units from Group A and/or B below.
• Select 2 additional units from Group A, B and/or C below.

**GROUP A (* compulsory units)**

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC2701A</td>
<td>Follow OHS procedures*</td>
</tr>
<tr>
<td>RTC2702A</td>
<td>Observe environmental work practices*</td>
</tr>
<tr>
<td>RTC2705A</td>
<td>Work effectively in the industry*</td>
</tr>
<tr>
<td>RTC2801A</td>
<td>Participate in workplace communications*</td>
</tr>
<tr>
<td>RTC3701A</td>
<td>Respond to emergencies*</td>
</tr>
<tr>
<td>FPIFGM147A</td>
<td>Read and interpret maps</td>
</tr>
<tr>
<td>RTD3202A</td>
<td>Construct access tracks</td>
</tr>
<tr>
<td>RTD3205A</td>
<td>Construct conservation earthworks</td>
</tr>
<tr>
<td>RTD3212A</td>
<td>Implement erosion and sediment control measures</td>
</tr>
<tr>
<td>RTC3311A</td>
<td>Perform specialised machinery maintenance</td>
</tr>
<tr>
<td>RTD3315A</td>
<td>Transport machinery</td>
</tr>
</tbody>
</table>

**GROUP B**

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEM16.1BA</td>
<td>Give formal presentations and take part in meetings</td>
</tr>
<tr>
<td>PUAFIR303A</td>
<td>Suppress wildfire</td>
</tr>
<tr>
<td>RTD3034A</td>
<td>Implement revegetation works</td>
</tr>
<tr>
<td>RTC3218A</td>
<td>Undertake a site assessment</td>
</tr>
<tr>
<td>RTC3310A</td>
<td>Operate specialised machinery and equipment</td>
</tr>
<tr>
<td>RTD3507A</td>
<td>Undertake sampling and testing of water</td>
</tr>
<tr>
<td>RTC3704A</td>
<td>Prepare and apply chemicals</td>
</tr>
<tr>
<td>RTC3705A</td>
<td>Transport, handle and store chemicals</td>
</tr>
<tr>
<td>RTC3805A</td>
<td>Coordinate work site activities</td>
</tr>
</tbody>
</table>

**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 2, 3 & 4. These units must be relevant to work undertaken in Conservation and Land Management.
QUALIFICATION RULES
For a Certificate III in Conservation and Land Management at least 12 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

Certificate III in Conservation and Land Management (specialising in community coordination and facilitation)
A total of 15 units of competency must be completed.

- Select 9 units from Group A below.
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

GROUP A (* compulsory units)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC2701A</td>
<td>Follow OHS procedures*</td>
</tr>
<tr>
<td>RTC2702A</td>
<td>Observe environmental work practices*</td>
</tr>
<tr>
<td>RTC2705A</td>
<td>Work effectively in the industry*</td>
</tr>
<tr>
<td>RTC2801A</td>
<td>Participate in workplace communications*</td>
</tr>
<tr>
<td>RTC3701A</td>
<td>Respond to emergencies*</td>
</tr>
<tr>
<td>BSBCM206A</td>
<td>Process and maintain workplace information</td>
</tr>
<tr>
<td>BSBCM306A</td>
<td>Produce business documents</td>
</tr>
<tr>
<td>RTD3811A</td>
<td>Coordinate board/committee elections</td>
</tr>
<tr>
<td>RTD3814A</td>
<td>Present proposed courses of action to meeting</td>
</tr>
<tr>
<td>RTD3815A</td>
<td>Represent group at functions</td>
</tr>
<tr>
<td>RTD3816A</td>
<td>Service committees</td>
</tr>
</tbody>
</table>

GROUP B

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEM161BA</td>
<td>Give formal presentations and take part in meetings</td>
</tr>
<tr>
<td>BSBADM308A</td>
<td>Process payroll</td>
</tr>
<tr>
<td>BSBCM308A</td>
<td>Maintain financial records</td>
</tr>
<tr>
<td>RTD3812A</td>
<td>Coordinate fund-raising activities</td>
</tr>
<tr>
<td>RTD3813A</td>
<td>Coordinate social events to support group purposes</td>
</tr>
</tbody>
</table>

GROUP C
This group includes other units of competency from Conservation and Land Management and/or other
Training Packages at nominal AQF Levels 2, 3 & 4. These units must be relevant to work undertaken in Conservation and Land Management.

**QUALIFICATION RULES**

For a Certificate III in Conservation and Land Management at least 12 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

Certificate III in Conservation and Land Management (specialising in Indigenous land management)

A total of 15 units of competency must be completed.

- Select 9 units from Group A below (including the 5 designated compulsory units).
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

**GROUP A (** compulsory units **)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC2701A</td>
<td>Follow OHS procedures*</td>
</tr>
<tr>
<td>RTC2702A</td>
<td>Observe environmental work practices*</td>
</tr>
<tr>
<td>RTC2705A</td>
<td>Work effectively in the industry*</td>
</tr>
<tr>
<td>RTC2801A</td>
<td>Participate in workplace communications*</td>
</tr>
<tr>
<td>RTC3701A</td>
<td>Respond to emergencies*</td>
</tr>
<tr>
<td>RTD3034A</td>
<td>Implement revegetation works</td>
</tr>
<tr>
<td>RTC3213A</td>
<td>Implement property improvement, construction and repair</td>
</tr>
<tr>
<td>RTD3505A</td>
<td>Maintain natural areas</td>
</tr>
<tr>
<td>RTC3704A</td>
<td>Prepare and apply chemicals</td>
</tr>
<tr>
<td>RTD3802A</td>
<td>Provide appropriate information on cultural knowledge</td>
</tr>
<tr>
<td>RTD3817A</td>
<td>Propose appropriate uses of traditional customs</td>
</tr>
<tr>
<td>RTD3903A</td>
<td>Work in an Indigenous community or organisation</td>
</tr>
</tbody>
</table>

**GROUP B**

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBCMN306A</td>
<td>Produce business documents</td>
</tr>
<tr>
<td>FPINCR034A</td>
<td>Utilise burning for natural and cultural resource management</td>
</tr>
<tr>
<td>RTC3201A</td>
<td>Conduct operational inspection of park facilities</td>
</tr>
<tr>
<td>RTC3211A</td>
<td>Implement a maintenance program for an aquatic environment</td>
</tr>
</tbody>
</table>
RTD3501A  Assist in the implementation of legislation
RTD3814A  Present proposed courses of action to meeting
THTFTG08B  Interpret aspects of local Australian indigenous culture
THTFTG14A  Prepare specialised interpretive content (cultural and heritage environments)

GROUP C

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 2, 3 & 4. These units must be relevant to work undertaken in Conservation and Land Management.

QUALIFICATION RULES

For a Certificate III in Conservation and Land Management at least 12 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

Certificate III in Conservation and Land Management (specialising in lands, parks and wildlife)

A total of 15 units of competency must be completed.

- Select 9 units from Group A below (including the 5 designated compulsory units).
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

GROUP A (* compulsory units)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC2701A</td>
<td>Follow OHS procedures*</td>
</tr>
<tr>
<td>RTC2702A</td>
<td>Observe environmental work practices*</td>
</tr>
<tr>
<td>RTC2705A</td>
<td>Work effectively in the industry*</td>
</tr>
<tr>
<td>RTC2801A</td>
<td>Participate in workplace communications*</td>
</tr>
<tr>
<td>RTC3701A</td>
<td>Respond to emergencies*</td>
</tr>
<tr>
<td>RTD3034A</td>
<td>Implement revegetation works</td>
</tr>
<tr>
<td>RTC3401A</td>
<td>Control weeds</td>
</tr>
<tr>
<td>RTD3501A</td>
<td>Assist in the implementation of legislation</td>
</tr>
<tr>
<td>RTD3505A</td>
<td>Maintain natural areas</td>
</tr>
<tr>
<td>RTC3704A</td>
<td>Prepare and apply chemicals</td>
</tr>
<tr>
<td>RTD3804A</td>
<td>Supervise park visitor activities</td>
</tr>
<tr>
<td>RTC3805A</td>
<td>Coordinate work site activities</td>
</tr>
</tbody>
</table>

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### GROUP B

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPIFGM147A</td>
<td>Read and interpret maps</td>
</tr>
<tr>
<td>FPINCR034A</td>
<td>Utilise burning for natural and cultural resource management</td>
</tr>
<tr>
<td>PUAFIR303A</td>
<td>Suppress wildfire</td>
</tr>
<tr>
<td>RTD3125A</td>
<td>Respond to wildlife emergencies</td>
</tr>
<tr>
<td>RTC3201A</td>
<td>Conduct operational inspection of park facilities</td>
</tr>
<tr>
<td>RTC3206A</td>
<td>Erect timber structures and features</td>
</tr>
<tr>
<td>RTC3209A</td>
<td>Plan and construct conventional fencing</td>
</tr>
<tr>
<td>RTC3211A</td>
<td>Implement a maintenance program for an aquatic environment</td>
</tr>
<tr>
<td>RTD3508A</td>
<td>Perform diving for scientific purposes</td>
</tr>
<tr>
<td>RTD3703A</td>
<td>Respond to rescue incidents</td>
</tr>
<tr>
<td>RTC3705A</td>
<td>Transport, handle and store chemicals</td>
</tr>
<tr>
<td>THTFTG14A</td>
<td>Prepare specialised interpretive content (cultural and heritage environments)</td>
</tr>
</tbody>
</table>

### GROUP C

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 2, 3 & 4. These units must be relevant to work undertaken in Conservation and Land Management.

### QUALIFICATION RULES

For a Certificate III in Conservation and Land Management at least 12 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

**Certificate III in Conservation and Land Management (specialising in natural area restoration & management)**

A total of 15 units of competency must be completed.

- Select 9 units from Group A below (including the 5 designated compulsory units).
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

### GROUP A (* compulsory units)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC2701A</td>
<td>Follow OHS procedures*</td>
</tr>
<tr>
<td>RTC2702A</td>
<td>Observe environmental work practices*</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>RTC2705A</td>
<td>Work effectively in the industry*</td>
</tr>
<tr>
<td>RTC2801A</td>
<td>Participate in workplace communications*</td>
</tr>
<tr>
<td>RTC3701A</td>
<td>Respond to emergencies*</td>
</tr>
<tr>
<td>RTC3016A</td>
<td>Provide information on plants and their culture</td>
</tr>
<tr>
<td>RTD3034A</td>
<td>Implement revegetation works</td>
</tr>
<tr>
<td>RTC3218A</td>
<td>Undertake a site assessment</td>
</tr>
<tr>
<td>RTC3401A</td>
<td>Control weeds</td>
</tr>
<tr>
<td>RTD3505A</td>
<td>Maintain natural areas</td>
</tr>
<tr>
<td>RTD3509A</td>
<td>Collect and preserve biological samples</td>
</tr>
<tr>
<td>RTC3704A</td>
<td>Prepare and apply chemicals</td>
</tr>
<tr>
<td>RTC3805A</td>
<td>Coordinate work site activities</td>
</tr>
</tbody>
</table>

**GROUP B**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBCM306A</td>
<td>Produce business documents</td>
</tr>
<tr>
<td>FPIF147A</td>
<td>Read and interpret maps</td>
</tr>
<tr>
<td>FPIF006A</td>
<td>Extract seed</td>
</tr>
<tr>
<td>FPIF008A</td>
<td>Conduct seed collecting operations</td>
</tr>
<tr>
<td>FPINC034A</td>
<td>Utilise burning for natural and cultural resource management</td>
</tr>
<tr>
<td>MEM16.1BA</td>
<td>Give formal presentations and take part in meetings</td>
</tr>
<tr>
<td>RTD3205A</td>
<td>Construct conservation earthworks</td>
</tr>
<tr>
<td>RTC3206A</td>
<td>Erect timber structures and features</td>
</tr>
<tr>
<td>RTC3209A</td>
<td>Plan and construct conventional fencing</td>
</tr>
<tr>
<td>RTC3211A</td>
<td>Implement a maintenance program for an aquatic environment</td>
</tr>
<tr>
<td>RTC3310A</td>
<td>Operate specialised machinery and equipment</td>
</tr>
<tr>
<td>RTC3404A</td>
<td>Control plant pests, diseases and disorders</td>
</tr>
<tr>
<td>RTD3507A</td>
<td>Undertake sampling and testing of water</td>
</tr>
<tr>
<td>RTC3705A</td>
<td>Transport, handle and store chemicals</td>
</tr>
</tbody>
</table>

**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 2, 3 & 4. These units must be relevant to work undertaken in Conservation and Land Management.
QUALIFICATION RULES

For a Certificate III in Conservation and Land Management at least 12 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

Certificate III in Conservation and Land Management (specialising in weed management)

A total of 15 units of competency must be completed.

- Select 9 units from Group A below (including the 6 designated compulsory units).
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

GROUP A (* compulsory units)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC2701A</td>
<td>Follow OHS procedures*</td>
</tr>
<tr>
<td>RTC2702A</td>
<td>Observe environmental work practices*</td>
</tr>
<tr>
<td>RTC2705A</td>
<td>Work effectively in the industry*</td>
</tr>
<tr>
<td>RTC2801A</td>
<td>Participate in workplace communications*</td>
</tr>
<tr>
<td>RTC3701A</td>
<td>Respond to emergencies*</td>
</tr>
<tr>
<td>FPIFGM147A</td>
<td>Read and interpret maps</td>
</tr>
<tr>
<td>RTC3401A</td>
<td>Control weeds*</td>
</tr>
<tr>
<td>RTD3405A</td>
<td>Monitor and evaluate the local pest management action plan</td>
</tr>
<tr>
<td>RTD3501A</td>
<td>Assist in the implementation of legislation</td>
</tr>
<tr>
<td>RTD3502A</td>
<td>Carry out inspection of designated area</td>
</tr>
<tr>
<td>RTC3704A</td>
<td>Prepare and apply chemicals</td>
</tr>
</tbody>
</table>

GROUP B

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEM16.1BA</td>
<td>Give formal presentations and take part in meetings</td>
</tr>
<tr>
<td>RTC3211A</td>
<td>Implement a maintenance program for an aquatic environment</td>
</tr>
<tr>
<td>RTC3310A</td>
<td>Operate specialised machinery and equipment</td>
</tr>
<tr>
<td>RTC3705A</td>
<td>Transport, handle and store chemicals</td>
</tr>
<tr>
<td>RTD3706A</td>
<td>Maintain biological cultures</td>
</tr>
<tr>
<td>RTD3707A</td>
<td>Release biological agents</td>
</tr>
<tr>
<td>RTC3805A</td>
<td>Coordinate work site activities</td>
</tr>
</tbody>
</table>
This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 2, 3 & 4. These units must be relevant to work undertaken in Conservation and Land Management.

**QUALIFICATION RULES**

For a Certificate III in Conservation and Land Management at least 12 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

**Certificate III in Conservation and Land Management (specialising in vertebrate pest management)**

A total of 15 units of competency must be completed.

- Select 9 units from Group A below (including the 5 designated compulsory units).
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

**GROUP A (* compulsory units)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC2701A</td>
<td>Follow OHS procedures*</td>
</tr>
<tr>
<td>RTC2702A</td>
<td>Observe environmental work practices*</td>
</tr>
<tr>
<td>RTC2705A</td>
<td>Work effectively in the industry*</td>
</tr>
<tr>
<td>RTC2801A</td>
<td>Participate in workplace communications*</td>
</tr>
<tr>
<td>RTC3701A</td>
<td>Respond to emergencies*</td>
</tr>
<tr>
<td>RTD3132A</td>
<td>Survey pest animals</td>
</tr>
<tr>
<td>RTD3405A</td>
<td>Monitor and evaluate the local pest management action plan</td>
</tr>
<tr>
<td>RTD3501A</td>
<td>Assist in the implementation of legislation</td>
</tr>
<tr>
<td>RTC3704A</td>
<td>Prepare and apply chemicals</td>
</tr>
<tr>
<td>RTD3707A</td>
<td>Release biological agents</td>
</tr>
<tr>
<td>RTD3710A</td>
<td>Identify and select explosive products</td>
</tr>
<tr>
<td>RTD3711A</td>
<td>Prepare and use explosives</td>
</tr>
</tbody>
</table>

**GROUP B**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPIFGM147A</td>
<td>Read and interpret maps</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>MEM16.1BA</td>
<td>Give formal presentations and take part in meetings</td>
</tr>
<tr>
<td>RTC3310A</td>
<td>Operate specialised machinery and equipment</td>
</tr>
<tr>
<td>RTD3502A</td>
<td>Carry out inspection of designated area</td>
</tr>
<tr>
<td>RTC3705A</td>
<td>Transport, handle and store chemicals</td>
</tr>
<tr>
<td>RTD3709A</td>
<td>Handle and store explosives</td>
</tr>
<tr>
<td>RTC3805A</td>
<td>Coordinate work site activities</td>
</tr>
<tr>
<td>SRXTEM004A</td>
<td>Deal with conflict</td>
</tr>
</tbody>
</table>

**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 2, 3 & 4. These units must be relevant to work undertaken in Conservation and Land Management.

**QUALIFICATION RULES**

For a Certificate III in Conservation and Land Management at least 12 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.
RTD40102 Certificate IV in Conservation and Land Management

A total of 12 units of competency must be completed.

- Select 4 units from Group A below.
- Select 6 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

| GROUP A |
|------------------|---------------------------------|
| RTD4020A        | Plan the implementation of revegetation works |
| RTC4024A        | Recommend plants and cultural practices |
| RTD4402A        | Define the pest problem in a local area |
| RTD4504A        | Monitor biodiversity |
| RTD4506A        | Process applications for changes in land use |
| RTD4507A        | Produce maps for land management purposes |
| RTD4509A        | Report on place of potential cultural significance |
| RTD4510A        | Supervise natural area restoration works |
| RTD4811A        | Provide information on environmental issues and policies |

| GROUP B |
|------------------|---------------------------------|
| WORKING WITH PLANTS |
| FPIFGM004A       | Manage seed collection |

| CONSTRUCTION AND MAINTENANCE |
|-----------------------------|--------------------------|
| RTD4205A       | Set out conservation earthworks |
| RTC4206A       | Supervise landscape project works |
| RTD4207A       | Supervise on-site implementation of conservation earthworks |

| MACHINERY AND EQUIPMENT |
|-------------------------|-----------------------------|
| RTD4303A                | Prepare safe operating procedures for calibration of equipment |
| RTC4306A                | Supervise maintenance of machinery and equipment |

<p>| PESTS AND DISEASES |
|--------------------|-------------------------------------------------|
| RTD4403A           | Develop a pest management action plan within a local area |
| RTD4404A           | Develop monitoring procedures for the local pest management strategy |</p>
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD4405A</td>
<td>Coordinate the local pest management strategy</td>
</tr>
<tr>
<td>RTD4406A</td>
<td>Implement pest management action plans</td>
</tr>
<tr>
<td>RTD4407A</td>
<td>Investigate a reported pest treatment failure</td>
</tr>
</tbody>
</table>

**RESOURCE MANAGEMENT**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD4501A</td>
<td>Contribute to the proposal for a negotiated outcome for a given area of country</td>
</tr>
<tr>
<td>RTD4502A</td>
<td>Implement land and sea management practices</td>
</tr>
<tr>
<td>RTD4503A</td>
<td>Inspect and monitor cultural places</td>
</tr>
<tr>
<td>RTD4505A</td>
<td>Participate in assessments of project submissions</td>
</tr>
<tr>
<td>RTD4508A</td>
<td>Protect places of cultural significance</td>
</tr>
</tbody>
</table>

**HEALTH AND SAFETY**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC4701A</td>
<td>Implement and monitor the enterprise OHS program</td>
</tr>
<tr>
<td>RTC4702A</td>
<td>Minimise risks in the use of chemicals</td>
</tr>
<tr>
<td>RTC4703A</td>
<td>Plan and implement a chemical use program</td>
</tr>
</tbody>
</table>

**WORKING WITH PEOPLE**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD4802A</td>
<td>Develop approaches to include cultural and human diversity</td>
</tr>
<tr>
<td>RTD4804A</td>
<td>Develop community networks</td>
</tr>
<tr>
<td>RTD4805A</td>
<td>Facilitate ongoing group development</td>
</tr>
<tr>
<td>RTD4806A</td>
<td>Obtain and manage sponsorship</td>
</tr>
<tr>
<td>RTD4807A</td>
<td>Obtain resources from community and group</td>
</tr>
<tr>
<td>RTD4808A</td>
<td>Promote community programs</td>
</tr>
<tr>
<td>RTD4809A</td>
<td>Record and document community history</td>
</tr>
<tr>
<td>RTD4810A</td>
<td>Support individuals in resource management change process</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBFLM404A</td>
<td>Lead work teams</td>
</tr>
<tr>
<td>BSZ404A</td>
<td>Train small groups</td>
</tr>
</tbody>
</table>

**ADMINISTRATION AND BUSINESS**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC4905A</td>
<td>Cost a project</td>
</tr>
<tr>
<td>RTD4906A</td>
<td>Develop work practices to accommodate cultural identity</td>
</tr>
<tr>
<td>RTD4907A</td>
<td>Establish an office</td>
</tr>
<tr>
<td>RTC4908A</td>
<td>Supervise work routines and staff performance</td>
</tr>
</tbody>
</table>
GROUP C

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 3, 4 & 5. These units must be relevant to work undertaken in Conservation and Land Management.

QUALIFICATION RULES

For a Certificate IV in Conservation and Land Management at least 10 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

Certificate IV in Conservation and Land Management (specialising in conservation earthworks)

A total of 12 units of competency must be completed.

- Select 5 units from Group A below.
- Select 5 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

GROUP A

BSBFLM404A  Lead work teams
RTD4020A  Plan the implementation of revegetation works
RTD4205A  Set out conservation earthworks
RTC4306A  Supervise maintenance of machinery and equipment
RTD4207A  Supervise on-site implementation of conservation earthworks
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC4905A</td>
<td>Cost a project</td>
</tr>
<tr>
<td>RTC4911A</td>
<td>Operate within a budget framework</td>
</tr>
</tbody>
</table>

**GROUP B**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSZ404A</td>
<td>Train small groups</td>
</tr>
<tr>
<td>RTC4206A</td>
<td>Supervise landscape project works</td>
</tr>
<tr>
<td>RTD4510A</td>
<td>Supervise natural area restoration works</td>
</tr>
<tr>
<td>RTC4701A</td>
<td>Implement and monitor the enterprise OHS program</td>
</tr>
<tr>
<td>RTC4702A</td>
<td>Minimise risks in the use of chemicals</td>
</tr>
<tr>
<td>RTC4703A</td>
<td>Plan and implement a chemical use program</td>
</tr>
<tr>
<td>RTC4908A</td>
<td>Supervise work routines and staff performance</td>
</tr>
<tr>
<td>TDTR298B</td>
<td>Source goods/services and evaluate contractors</td>
</tr>
</tbody>
</table>

**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 3, 4 & 5. These units must be relevant to work undertaken in Conservation and Land Management.

**QUALIFICATION RULES**

For a Certificate IV in Conservation and Land Management at least 10 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

Certificate IV in Conservation and Land Management (specialising in community coordination and facilitation)

A total of 12 units of competency must be completed.

- Select 5 units from Group A below.
- Select 5 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

**GROUP A**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBCMN405A</td>
<td>Analyse and present research information</td>
</tr>
<tr>
<td>BSBFLM404A</td>
<td>Lead work teams</td>
</tr>
<tr>
<td>BSZ404A</td>
<td>Train small groups</td>
</tr>
<tr>
<td>PUACOM012A</td>
<td>Liaise with the media at a local level</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------------------------</td>
</tr>
<tr>
<td>PSPPM402A</td>
<td>Implement projects</td>
</tr>
<tr>
<td>RTD4810A</td>
<td>Support individuals in resource management change process</td>
</tr>
<tr>
<td>RTD4804A</td>
<td>Develop community networks</td>
</tr>
<tr>
<td>RTD4805A</td>
<td>Facilitate ongoing group development</td>
</tr>
<tr>
<td>RTD4811A</td>
<td>Provide information on environmental issues and policies</td>
</tr>
</tbody>
</table>

**GROUP B**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBCMN408A</td>
<td>Report on financial activity</td>
</tr>
<tr>
<td>PSPPOLI401A</td>
<td>Support policy implementation</td>
</tr>
<tr>
<td>RTD4505A</td>
<td>Participate in assessments of project submissions</td>
</tr>
<tr>
<td>RTC4701A</td>
<td>Implement and monitor the enterprise OHS program</td>
</tr>
<tr>
<td>RTD4802A</td>
<td>Develop approaches to include cultural and human diversity</td>
</tr>
<tr>
<td>RTD4806A</td>
<td>Obtain and manage sponsorship</td>
</tr>
<tr>
<td>RTD4807A</td>
<td>Obtain resources from community and group</td>
</tr>
<tr>
<td>RTD4808A</td>
<td>Promote community programs</td>
</tr>
<tr>
<td>RTC4905A</td>
<td>Cost a project</td>
</tr>
<tr>
<td>RTD4907A</td>
<td>Establish an office</td>
</tr>
<tr>
<td>RTD4909A</td>
<td>Prepare project acquittal</td>
</tr>
<tr>
<td>RTD4910A</td>
<td>Report on project</td>
</tr>
<tr>
<td>RTC4911A</td>
<td>Operate within a budget framework</td>
</tr>
<tr>
<td>RTD4912A</td>
<td>Contribute to association governance</td>
</tr>
<tr>
<td>TDTR298B</td>
<td>Source goods/services and evaluate contractors</td>
</tr>
</tbody>
</table>

**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 3, 4 & 5. These units must be relevant to work undertaken in Conservation and Land Management.

**QUALIFICATION RULES**

For a Certificate IV in Conservation and Land Management at least 10 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

**Certificate IV in Conservation and Land Management (specialising in Indigenous land management)**
A total of 12 units of competency must be completed.

- Select 5 units from Group A below.
- Select 5 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

**GROUP A**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD4020A</td>
<td>Plan the implementation of revegetation works</td>
</tr>
<tr>
<td>RTD4501A</td>
<td>Contribute to the proposal for a negotiated outcome for a given area of country</td>
</tr>
<tr>
<td>RTD4502A</td>
<td>Implement land and sea management practices</td>
</tr>
<tr>
<td>RTD4508A</td>
<td>Protect places of cultural significance</td>
</tr>
<tr>
<td>RTD4510A</td>
<td>Supervise natural area restoration works</td>
</tr>
<tr>
<td>RTD4906A</td>
<td>Develop work practices to accommodate cultural identity</td>
</tr>
<tr>
<td>THTPPD05B</td>
<td>Plan and develop interpretive activities</td>
</tr>
<tr>
<td>THTPPD07B</td>
<td>Plan and develop culturally appropriate tourism operations</td>
</tr>
</tbody>
</table>

**GROUP B**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSZ404A</td>
<td>Train small groups</td>
</tr>
<tr>
<td>PSPPM402A</td>
<td>Implement projects</td>
</tr>
<tr>
<td>RTC4306A</td>
<td>Supervise maintenance of machinery and equipment</td>
</tr>
<tr>
<td>RTC4701A</td>
<td>Implement and monitor the enterprise OHS program</td>
</tr>
<tr>
<td>RTC4702A</td>
<td>Minimise risks in the use of chemicals</td>
</tr>
<tr>
<td>RTC4703A</td>
<td>Plan and implement a chemical use program</td>
</tr>
<tr>
<td>RTD4808A</td>
<td>Promote community programs</td>
</tr>
<tr>
<td>RTD4809A</td>
<td>Record and document community history</td>
</tr>
<tr>
<td>RTC4905A</td>
<td>Cost a project</td>
</tr>
<tr>
<td>RTC4908A</td>
<td>Supervise work routines and staff performance</td>
</tr>
<tr>
<td>RTD4909A</td>
<td>Prepare project acquittal</td>
</tr>
<tr>
<td>RTD4910A</td>
<td>Report on project</td>
</tr>
<tr>
<td>RTC4911A</td>
<td>Operate within a budget framework</td>
</tr>
<tr>
<td>TDTR298B</td>
<td>Source goods/services and evaluate contractors</td>
</tr>
</tbody>
</table>
GROUP C

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 3, 4 & 5. These units must be relevant to work undertaken in Conservation and Land Management.

QUALIFICATION RULES

For a Certificate IV in Conservation and Land Management at least 10 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

Certificate IV in Conservation and Land Management (specialising in lands, parks and wildlife)

A total of 12 units of competency must be completed.

- Select 5 units from Group A below.
- Select 5 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

GROUP A

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD4020A</td>
<td>Plan the implementation of revegetation works</td>
</tr>
<tr>
<td>RTC4306A</td>
<td>Supervise maintenance of machinery and equipment</td>
</tr>
<tr>
<td>RTD4503A</td>
<td>Inspect and monitor cultural places</td>
</tr>
<tr>
<td>RTD4504A</td>
<td>Monitor biodiversity</td>
</tr>
<tr>
<td>RTD4508A</td>
<td>Protect places of cultural significance</td>
</tr>
<tr>
<td>RTD4510A</td>
<td>Supervise natural area restoration works</td>
</tr>
<tr>
<td>RTC4908A</td>
<td>Supervise work routines and staff performance</td>
</tr>
<tr>
<td>RTC4911A</td>
<td>Operate within a budget framework</td>
</tr>
</tbody>
</table>

GROUP B

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUACOM012A</td>
<td>Liaise with the media at a local level</td>
</tr>
<tr>
<td>RTD4207A</td>
<td>Supervise on-site implementation of conservation earthworks</td>
</tr>
<tr>
<td>RTD4509A</td>
<td>Report on place of potential cultural significance</td>
</tr>
<tr>
<td>RTC4701A</td>
<td>Implement and monitor the enterprise OHS program</td>
</tr>
<tr>
<td>RTC4702A</td>
<td>Minimise risks in the use of chemicals</td>
</tr>
<tr>
<td>RTC4703A</td>
<td>Plan and implement a chemical use program</td>
</tr>
<tr>
<td>RTD4809A</td>
<td>Record and document community history</td>
</tr>
</tbody>
</table>
### GROUP C

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 3, 4 & 5. These units must be relevant to work undertaken in Conservation and Land Management.

### QUALIFICATION RULES

For a Certificate IV in Conservation and Land Management at least 10 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

### Certificate IV in Conservation and Land Management (specialising in natural area restoration & management)

A total of 12 units of competency must be completed.

- Select 5 units from Group A below.
- Select 5 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

#### GROUP A

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>Unit Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSPPM402A</td>
<td>Implement projects</td>
</tr>
<tr>
<td>RTD4020A</td>
<td>Plan the implementation of revegetation works</td>
</tr>
<tr>
<td>RTC4024A</td>
<td>Recommend plants and cultural practices</td>
</tr>
<tr>
<td>RTD4403A</td>
<td>Develop a pest management action plan within a local area</td>
</tr>
<tr>
<td>RTD4504A</td>
<td>Monitor biodiversity</td>
</tr>
<tr>
<td>RTD4510A</td>
<td>Supervise natural area restoration works</td>
</tr>
<tr>
<td>RTC4701A</td>
<td>Implement and monitor the enterprise OHS program</td>
</tr>
<tr>
<td>RTC4702A</td>
<td>Minimise risks in the use of chemicals</td>
</tr>
<tr>
<td>RTC4905A</td>
<td>Cost a project</td>
</tr>
</tbody>
</table>

#### GROUP B

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>Unit Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBCMN405A</td>
<td>Analyse and present research information</td>
</tr>
<tr>
<td>BSZ404A</td>
<td>Train small groups</td>
</tr>
</tbody>
</table>
FPIFGM004A  Manage seed collection
RTC4306A  Supervise maintenance of machinery and equipment
RTD4507A  Produce maps for land management purposes
RTD4205A  Set out conservation earthworks
RTD4207A  Supervise on-site implementation of conservation earthworks
RTD4508A  Protect places of cultural significance
RTD4509A  Report on place of potential cultural significance
RTC4703A  Plan and implement a chemical use program
RTC4908A  Supervise work routines and staff performance
RTD4910A  Report on project
RTC4911A  Operate within a budget framework
TDTR298B  Source goods/services and evaluate contractors

GROUP C

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 3, 4 & 5. These units must be relevant to work undertaken in Conservation and Land Management.

QUALIFICATION RULES

For a Certificate IV in Conservation and Land Management at least 10 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

Certificate IV in Conservation and Land Management (specialising in weed management)

A total of 12 units of competency must be completed.

• Select 5 units from Group A below.

• Select 5 additional units from Group A and/or B below.

• Select 2 additional units from Group A, B and/or C below.

GROUP A

RTD4402A  Define the pest problem in a local area
RTD4403A  Develop a pest management action plan within a local area
RTD4404A  Develop monitoring procedures for the local pest management strategy
RTD4405A  Coordinate the local pest management strategy
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD4406A</td>
<td>Implement pest management action plans</td>
</tr>
<tr>
<td>RTD4407A</td>
<td>Investigate a reported pest treatment failure</td>
</tr>
</tbody>
</table>

**GROUP B**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD4020A</td>
<td>Plan the implementation of revegetation works</td>
</tr>
<tr>
<td>RTD4303A</td>
<td>Prepare safe operating procedures for calibration of equipment</td>
</tr>
<tr>
<td>RTC4306A</td>
<td>Supervise maintenance of machinery and equipment</td>
</tr>
<tr>
<td>RTD4507A</td>
<td>Produce maps for land management purposes</td>
</tr>
<tr>
<td>RTC4701A</td>
<td>Implement and monitor the enterprise OHS program</td>
</tr>
<tr>
<td>RTC4702A</td>
<td>Minimise risks in the use of chemicals</td>
</tr>
<tr>
<td>RTC4703A</td>
<td>Plan and implement a chemical use program</td>
</tr>
<tr>
<td>RTC4905A</td>
<td>Cost a project</td>
</tr>
<tr>
<td>RTC4908A</td>
<td>Supervise work routines and staff performance</td>
</tr>
<tr>
<td>RTC4911A</td>
<td>Operate within a budget framework</td>
</tr>
<tr>
<td>TDTR298B</td>
<td>Source goods/services and evaluate contractors</td>
</tr>
</tbody>
</table>

**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 3, 4 & 5. These units must be relevant to work undertaken in Conservation and Land Management.

**QUALIFICATION RULES**

For a Certificate IV in Conservation and Land Management at least 10 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

**Certificate IV in Conservation and Land Management (specialising in vertebrate pest management)**

A total of 12 units of competency must be completed.

- Select 5 units from Group A below.
- Select 5 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

**GROUP A**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD4402A</td>
<td>Define the pest problem in a local area</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>RTD4403A</td>
<td>Develop a pest management action plan within a local area</td>
</tr>
<tr>
<td>RTD4404A</td>
<td>Develop monitoring procedures for the local pest management strategy</td>
</tr>
<tr>
<td>RTD4405A</td>
<td>Coordinate the local pest management strategy</td>
</tr>
<tr>
<td>RTD4406A</td>
<td>Implement pest management action plans</td>
</tr>
<tr>
<td>RTD4407A</td>
<td>Investigate a reported pest treatment failure</td>
</tr>
</tbody>
</table>

**GROUP B**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBCMN405A</td>
<td>Analyse and present research information</td>
</tr>
<tr>
<td>RTC4306A</td>
<td>Supervise maintenance of machinery and equipment</td>
</tr>
<tr>
<td>RTC4701A</td>
<td>Implement and monitor the enterprise OHS program</td>
</tr>
<tr>
<td>RTC4702A</td>
<td>Minimise risks in the use of chemicals</td>
</tr>
<tr>
<td>RTC4703A</td>
<td>Plan and implement a chemical use program</td>
</tr>
<tr>
<td>RTC4905A</td>
<td>Cost a project</td>
</tr>
<tr>
<td>RTC4908A</td>
<td>Supervise work routines and staff performance</td>
</tr>
<tr>
<td>RTC4911A</td>
<td>Operate within a budget framework</td>
</tr>
<tr>
<td>TDTR298B</td>
<td>Source goods/services and evaluate contractors</td>
</tr>
</tbody>
</table>

**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 3, 4 & 5. These units must be relevant to work undertaken in Conservation and Land Management.

**QUALIFICATION RULES**

For a Certificate IV in Conservation and Land Management at least 10 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.
RTD50102 Diploma of Conservation and Land Management

A total of 10 units of competency must be completed.

- Select 4 units from Group A below.
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

GROUP A

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC5011A</td>
<td>Collect and classify plants</td>
</tr>
<tr>
<td>RTD5203A</td>
<td>Plan erosion and sediment control measures</td>
</tr>
<tr>
<td>RTD5401A</td>
<td>Define the pest problem in a regional or broader context</td>
</tr>
<tr>
<td>RTD5501A</td>
<td>Assess applications for legislative compliance</td>
</tr>
<tr>
<td>RTD5502A</td>
<td>Conduct field research into natural and cultural resources</td>
</tr>
<tr>
<td>RTD5503A</td>
<td>Design a natural area restoration project</td>
</tr>
<tr>
<td>RTC5504A</td>
<td>Develop a management plan for a designated area</td>
</tr>
<tr>
<td>RTD5507A</td>
<td>Develop conservation strategies for cultural resources</td>
</tr>
<tr>
<td>RTD5510A</td>
<td>Implement plans of management</td>
</tr>
<tr>
<td>RTC5519A</td>
<td>Conduct biological surveys</td>
</tr>
<tr>
<td>RTC5520A</td>
<td>Manage parks and reserves</td>
</tr>
<tr>
<td>RTD5522A</td>
<td>Plan river restoration works</td>
</tr>
<tr>
<td>BSBMGT507A</td>
<td>Manage environmental performance</td>
</tr>
</tbody>
</table>

GROUP B

WORKING WITH PLANTS

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD5003A</td>
<td>Manage natural area restoration programs</td>
</tr>
</tbody>
</table>

WORKING WITH ANIMALS

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD5102A</td>
<td>Manage fauna populations</td>
</tr>
</tbody>
</table>

CONSTRUCTION AND MAINTENANCE

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC5201A</td>
<td>Conduct comprehensive inspection of park facilities</td>
</tr>
<tr>
<td>RTD5202A</td>
<td>Design control measures and structures</td>
</tr>
<tr>
<td>RTD5204A</td>
<td>Plan conservation earthworks</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>FPIFGM137A</td>
<td>Manage road construction and maintenance</td>
</tr>
<tr>
<td><strong>MACHINERY AND EQUIPMENT</strong></td>
<td></td>
</tr>
<tr>
<td>RTC5303A</td>
<td>Manage machinery and equipment</td>
</tr>
<tr>
<td><strong>PESTS AND DISEASES</strong></td>
<td></td>
</tr>
<tr>
<td>RTD5402A</td>
<td>Develop a strategy for the management of target pests</td>
</tr>
<tr>
<td>RTD5403A</td>
<td>Develop a system for monitoring the pest management strategy</td>
</tr>
<tr>
<td>RTD5404A</td>
<td>Coordinate the pest management strategy in a regional or broader context</td>
</tr>
<tr>
<td>RTD5405A</td>
<td>Evaluate the pest management strategy</td>
</tr>
<tr>
<td><strong>RESOURCE MANAGEMENT</strong></td>
<td></td>
</tr>
<tr>
<td>RTD5508A</td>
<td>Develop strategies for Indigenous land or sea management</td>
</tr>
<tr>
<td>RTD5509A</td>
<td>Evaluate project submissions</td>
</tr>
<tr>
<td>RTD5511A</td>
<td>Manage restoration of cultural places</td>
</tr>
<tr>
<td>RTD5512A</td>
<td>Manage the implementation of legislation</td>
</tr>
<tr>
<td>RTD5513A</td>
<td>Manage wildfire hazard reduction programs</td>
</tr>
<tr>
<td>RTD5517A</td>
<td>Propose a negotiated outcome for a given area of country</td>
</tr>
<tr>
<td>RTD5518A</td>
<td>Review assessments for legislative compliance</td>
</tr>
<tr>
<td>FPINCR033A</td>
<td>Plan burning activities for natural and cultural resource management</td>
</tr>
<tr>
<td><strong>HEALTH AND SAFETY</strong></td>
<td></td>
</tr>
<tr>
<td>RTC5701A</td>
<td>Establish and maintain the enterprise OHS program</td>
</tr>
<tr>
<td>RTC5702A</td>
<td>Develop and manage a chemical use strategy</td>
</tr>
<tr>
<td><strong>WORKING WITH PEOPLE</strong></td>
<td></td>
</tr>
<tr>
<td>RTC5801A</td>
<td>Provide specialist advice to clients</td>
</tr>
<tr>
<td>RTD5802A</td>
<td>Support group and community changes in resource management</td>
</tr>
<tr>
<td>RTD5803A</td>
<td>Operate within community cultures and goals</td>
</tr>
<tr>
<td>RTD5805A</td>
<td>Facilitate development of group goals and projects</td>
</tr>
<tr>
<td>RTD5806A</td>
<td>Promote group formation and development</td>
</tr>
<tr>
<td>BSBFLM501A</td>
<td>Manage personal work priorities and professional development</td>
</tr>
<tr>
<td>BSBFLM510A</td>
<td>Facilitate and capitalise on change and innovation</td>
</tr>
<tr>
<td>CHCCD4A</td>
<td>Develop and implement community programs</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>LGACOM502A</td>
<td>Devise and conduct community consultation</td>
</tr>
<tr>
<td>PUAPRO001A</td>
<td>Promote a learning environment in the workplace</td>
</tr>
</tbody>
</table>

**ADMINISTRATION AND BUSINESS**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD5904A</td>
<td>Map relationship of business enterprise to culture and country</td>
</tr>
<tr>
<td>RTD5907A</td>
<td>Plan for successful cultural practice at work</td>
</tr>
<tr>
<td>RTC5908A</td>
<td>Prepare estimates, quotes and tenders</td>
</tr>
<tr>
<td>RTD5910A</td>
<td>Contribute to regional planning process</td>
</tr>
<tr>
<td>RTD5911A</td>
<td>Manage the incorporation of a group</td>
</tr>
<tr>
<td>RTC5913A</td>
<td>Collect and manage data</td>
</tr>
<tr>
<td>RTC5914A</td>
<td>Prepare reports</td>
</tr>
<tr>
<td>RTD5915A</td>
<td>Investigate suspected breaches of NRM legislation</td>
</tr>
<tr>
<td>BSBADM502A</td>
<td>Manage meetings</td>
</tr>
<tr>
<td>BSBADM504A</td>
<td>Plan or review administration systems</td>
</tr>
<tr>
<td>BSBMGT503A</td>
<td>Prepare budgets and financial plans</td>
</tr>
<tr>
<td>BSBMGT506A</td>
<td>Recruit, select and induct staff</td>
</tr>
<tr>
<td>BSBSBM405A</td>
<td>Monitor and manage business operations</td>
</tr>
<tr>
<td>PSPPM502A</td>
<td>Manage projects</td>
</tr>
<tr>
<td>PSPPM503A</td>
<td>Finalise projects</td>
</tr>
<tr>
<td>PSPPOLD501A</td>
<td>Develop organisation policy</td>
</tr>
<tr>
<td>TDTR398B</td>
<td>Negotiate a contract</td>
</tr>
</tbody>
</table>

**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 4, 5 & 6. These units must be relevant to work undertaken in Conservation and Land Management.

**QUALIFICATION RULES**

For a Diploma of Conservation and Land Management at least 8 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

Diploma of Conservation and Land Management (specialising in conservation earthworks)

A total of 10 units of competency must be completed.

- Select 4 units from Group A below.
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

**GROUP A**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBMGT503A</td>
<td>Prepare budgets and financial plans</td>
</tr>
<tr>
<td>BSBSBM405A</td>
<td>Monitor and manage business operations</td>
</tr>
<tr>
<td>RTD5202A</td>
<td>Design control measures and structures</td>
</tr>
<tr>
<td>RTD5203A</td>
<td>Plan erosion and sediment control measures</td>
</tr>
<tr>
<td>RTD5204A</td>
<td>Plan conservation earthworks</td>
</tr>
<tr>
<td>RTC5908A</td>
<td>Prepare estimates, quotes and tenders</td>
</tr>
</tbody>
</table>

**GROUP B**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBADM504A</td>
<td>Plan or review administration systems</td>
</tr>
<tr>
<td>BSBFLM501A</td>
<td>Manage personal work priorities and professional development</td>
</tr>
<tr>
<td>PSPPM502A</td>
<td>Manage projects</td>
</tr>
<tr>
<td>RTD5003A</td>
<td>Manage natural area restoration programs</td>
</tr>
<tr>
<td>RTC5303A</td>
<td>Manage machinery and equipment</td>
</tr>
<tr>
<td>RTC5701A</td>
<td>Establish and maintain the enterprise OHS program</td>
</tr>
<tr>
<td>RTC5801A</td>
<td>Provide specialist advice to clients</td>
</tr>
<tr>
<td>RTC5913A</td>
<td>Collect and manage data</td>
</tr>
<tr>
<td>RTC5914A</td>
<td>Prepare reports</td>
</tr>
<tr>
<td>TDTR398B</td>
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**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 4, 5 & 6. These units must be relevant to work undertaken in Conservation and Land Management.

**QUALIFICATION RULES**

For a Diploma of Conservation and Land Management at least 8 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

**Diploma of Conservation and Land Management (specialising in community coordination and facilitation)**

A total of 10 units of competency must be completed.
- Select 4 units from Group A below.
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

**GROUP A**

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>BSBADM502A</td>
<td>Manage meetings</td>
</tr>
<tr>
<td>BSBFLM501A</td>
<td>Manage personal work priorities and professional development</td>
</tr>
<tr>
<td>BSBMGT503A</td>
<td>Prepare budgets and financial plans</td>
</tr>
<tr>
<td>BSBMGT504A</td>
<td>Manage budgets and financial plans</td>
</tr>
<tr>
<td>BSBFLM510A</td>
<td>Facilitate and capitalise on change and innovation</td>
</tr>
<tr>
<td>LGACOM502A</td>
<td>Devise and conduct community consultation</td>
</tr>
<tr>
<td>RTD5509A</td>
<td>Evaluate project submissions</td>
</tr>
<tr>
<td>RTD5802A</td>
<td>Support group and community changes in resource management</td>
</tr>
<tr>
<td>RTD5803A</td>
<td>Operate within community cultures and goals</td>
</tr>
<tr>
<td>RTD5805A</td>
<td>Facilitate development of group goals and projects</td>
</tr>
<tr>
<td>RTD5806A</td>
<td>Promote group formation and development</td>
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**GROUP B**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>BSBADM504A</td>
<td>Plan or review administrative systems</td>
</tr>
<tr>
<td>CHCCD4A</td>
<td>Develop and implement community programs</td>
</tr>
<tr>
<td>PSPPM502A</td>
<td>Manage projects</td>
</tr>
<tr>
<td>PSPPM503A</td>
<td>Finalise projects</td>
</tr>
<tr>
<td>PUAPRO001A</td>
<td>Promote a learning environment in the workplace</td>
</tr>
<tr>
<td>RTC5908A</td>
<td>Prepare estimates, quotes and tenders</td>
</tr>
<tr>
<td>RTD5910A</td>
<td>Contribute to regional planning process</td>
</tr>
<tr>
<td>RTD5911A</td>
<td>Manage the incorporation of a group</td>
</tr>
<tr>
<td>RTC5913A</td>
<td>Collect and manage data</td>
</tr>
<tr>
<td>RTC5914A</td>
<td>Prepare reports</td>
</tr>
</tbody>
</table>

**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 4, 5 or 6. These units must be relevant to work undertaken...
in Conservation and Land Management.

**QUALIFICATION RULES**

For a Diploma of Conservation and Land Management at least 8 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

Diploma of Conservation and Land Management (specialising in Indigenous land management)

A total of 10 units of competency must be completed.

- Select 4 units from Group A below.
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

**GROUP A**

<table>
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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>CHCCD4A</td>
<td>Develop and implement community programs</td>
</tr>
<tr>
<td>LGACOM502A</td>
<td>Devise and conduct community consultation</td>
</tr>
<tr>
<td>RTD5507A</td>
<td>Develop conservation strategies for cultural resources</td>
</tr>
<tr>
<td>RTD5508A</td>
<td>Develop strategies for Indigenous land or sea management</td>
</tr>
<tr>
<td>RTD5510A</td>
<td>Implement plans of management</td>
</tr>
<tr>
<td>RTD5511A</td>
<td>Manage restoration of cultural places</td>
</tr>
<tr>
<td>RTD5517A</td>
<td>Propose a negotiated outcome for a given area of country</td>
</tr>
<tr>
<td>RTD5904A</td>
<td>Map relationship of business enterprise to culture and country</td>
</tr>
<tr>
<td>RTD5907A</td>
<td>Plan for successful cultural practice at work</td>
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**GROUP B**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>BSBADM502A</td>
<td>Manage meetings</td>
</tr>
<tr>
<td>BSBADM504A</td>
<td>Plan or review administrative systems</td>
</tr>
<tr>
<td>BSBMGT503A</td>
<td>Prepare budgets and financial plans</td>
</tr>
<tr>
<td>BSBSBM405A</td>
<td>Monitor and manage business operations</td>
</tr>
<tr>
<td>PSPPM502A</td>
<td>Manage projects</td>
</tr>
<tr>
<td>RTD5003A</td>
<td>Manage natural area restoration programs</td>
</tr>
<tr>
<td>RTC5504A</td>
<td>Develop a management plan for a designated area</td>
</tr>
<tr>
<td>RTC5520A</td>
<td>Manage parks and reserves</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
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<td>--------------------------------------------------</td>
</tr>
<tr>
<td>RTC5701A</td>
<td>Establish and maintain the enterprise OHS program</td>
</tr>
<tr>
<td>RTC5908A</td>
<td>Prepare estimates, quotes and tenders</td>
</tr>
<tr>
<td>RTC5914A</td>
<td>Prepare reports</td>
</tr>
<tr>
<td>TDTR398B</td>
<td>Negotiate a contract</td>
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**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 4, 5 & 6. These units must be relevant to work undertaken in Conservation and Land Management.

**QUALIFICATION RULES**

For a Diploma of Conservation and Land Management at least 8 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

**Diploma of Conservation and Land Management (specialising in lands, parks and wildlife)**

A total of 10 units of competency must be completed.

- Select 4 units from Group A below.
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

**GROUP A**

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>BSBMGT503A</td>
<td>Prepare budgets and financial plans</td>
</tr>
<tr>
<td>RTD5003A</td>
<td>Manage natural area restoration programs</td>
</tr>
<tr>
<td>RTC5201A</td>
<td>Conduct comprehensive inspection of park facilities</td>
</tr>
<tr>
<td>RTC5504A</td>
<td>Develop a management plan for a designated area</td>
</tr>
<tr>
<td>RTD5510A</td>
<td>Implement plans of management</td>
</tr>
<tr>
<td>RTD5512A</td>
<td>Manage the implementation of legislation</td>
</tr>
<tr>
<td>RTC5520A</td>
<td>Manage parks and reserves</td>
</tr>
<tr>
<td>RTC5908A</td>
<td>Prepare estimates, quotes and tenders</td>
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**GROUP B**

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<tbody>
<tr>
<td>BSBADM504A</td>
<td>Plan or review administrative systems</td>
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<tr>
<td>BSBMGT504A</td>
<td>Manage budgets and financial plans</td>
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<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>BSBMGT506A</td>
<td>Recruit, select and induct staff</td>
</tr>
<tr>
<td>BSBSBM405A</td>
<td>Monitor and manage business operations</td>
</tr>
<tr>
<td>FPIFGM137A</td>
<td>Manage road construction and maintenance</td>
</tr>
<tr>
<td>FPINCR033A</td>
<td>Plan burning activities for natural and cultural resource management</td>
</tr>
<tr>
<td>PSPPM502A</td>
<td>Manage projects</td>
</tr>
<tr>
<td>RTD5102A</td>
<td>Manage fauna populations</td>
</tr>
<tr>
<td>RTC5303A</td>
<td>Manage machinery and equipment</td>
</tr>
<tr>
<td>RTD5501A</td>
<td>Assess applications for legislative compliance</td>
</tr>
<tr>
<td>RTD5502A</td>
<td>Conduct field research into natural and cultural resources</td>
</tr>
<tr>
<td>RTD5507A</td>
<td>Develop conservation strategies for cultural resources</td>
</tr>
<tr>
<td>RTD5511A</td>
<td>Manage restoration of cultural places</td>
</tr>
<tr>
<td>RTD5513A</td>
<td>Manage wildfire hazard reduction programs</td>
</tr>
<tr>
<td>RTD5518A</td>
<td>Review assessments for legislative compliance</td>
</tr>
<tr>
<td>RTC5519A</td>
<td>Conduct biological surveys</td>
</tr>
<tr>
<td>RTC5701A</td>
<td>Establish and maintain the enterprise OHS program</td>
</tr>
<tr>
<td>RTC5913A</td>
<td>Collect and manage data</td>
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<tr>
<td>RTC5914A</td>
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**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 4, 5 & 6. These units must be relevant to work undertaken in Conservation and Land Management.

**QUALIFICATION RULES**

For a Diploma of Conservation and Land Management at least 8 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

**Diploma of Conservation and Land Management (specialising in natural area restoration & management)**

A total of 10 units of competency must be completed.

- Select 4 units from Group A below.

- Select 4 additional units from Group A and/or B below.

- Select 2 additional units from Group A, B and/or C below.
### GROUP A

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>RTD5003A</td>
<td>Manage natural area restoration programs</td>
</tr>
<tr>
<td>RTC5011A</td>
<td>Collect and classify plants</td>
</tr>
<tr>
<td>RTD5503A</td>
<td>Design a natural area restoration project</td>
</tr>
<tr>
<td>RTC5504A</td>
<td>Develop a management plan for a designated area</td>
</tr>
<tr>
<td>RTD5510A</td>
<td>Implement plans of management</td>
</tr>
<tr>
<td>RTC5519A</td>
<td>Conduct biological surveys</td>
</tr>
<tr>
<td>RTC5520A</td>
<td>Manage parks and reserves</td>
</tr>
<tr>
<td>RTC5908A</td>
<td>Prepare estimates, quotes and tenders</td>
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### GROUP B

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<td>Prepare budgets and financial plans</td>
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<tr>
<td>BSBSBM405A</td>
<td>Monitor and manage business operations</td>
</tr>
<tr>
<td>RTD5102A</td>
<td>Manage fauna populations</td>
</tr>
<tr>
<td>RTD5204A</td>
<td>Plan conservation earthworks</td>
</tr>
<tr>
<td>RTD5402A</td>
<td>Develop a strategy for the management of target pests</td>
</tr>
<tr>
<td>RTD5403A</td>
<td>Develop a system for monitoring the pest management strategy</td>
</tr>
<tr>
<td>RTC5701A</td>
<td>Establish and maintain the enterprise OHS program</td>
</tr>
<tr>
<td>RTC5702A</td>
<td>Develop and manage a chemical use strategy</td>
</tr>
<tr>
<td>RTC5801A</td>
<td>Provide specialist advice to clients</td>
</tr>
<tr>
<td>RTC5913A</td>
<td>Collect and manage data</td>
</tr>
<tr>
<td>RTC5914A</td>
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### GROUP C

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 4, 5 & 6. These units must be relevant to work undertaken in Conservation and Land Management.

### QUALIFICATION RULES

For a Diploma of Conservation and Land Management at least 8 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.
Diploma of Conservation and Land Management (specialising in weed management)

A total of 10 units of competency must be completed.

- Select 4 units from Group A below.
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

**GROUP A**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD5401A</td>
<td>Define the pest problem in a regional or broader context</td>
</tr>
<tr>
<td>RTD5402A</td>
<td>Develop a strategy for the management of target pests</td>
</tr>
<tr>
<td>RTD5403A</td>
<td>Develop a system for monitoring the pest management strategy</td>
</tr>
<tr>
<td>RTD5404A</td>
<td>Coordinate the pest management strategy in a regional or broader context</td>
</tr>
<tr>
<td>RTD5405A</td>
<td>Evaluate the pest management strategy</td>
</tr>
<tr>
<td>RTD5512A</td>
<td>Manage the implementation of legislation</td>
</tr>
<tr>
<td>RTC5702A</td>
<td>Develop and manage a chemical use strategy</td>
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**GROUP B**

<table>
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</tr>
<tr>
<td>BSBMGT503A</td>
<td>Prepare budgets and financial plans</td>
</tr>
<tr>
<td>BSBSBM405A</td>
<td>Monitor and manage business operations</td>
</tr>
<tr>
<td>PSPPOLD501A</td>
<td>Develop organisation policy</td>
</tr>
<tr>
<td>RTC5011A</td>
<td>Collect and classify plants</td>
</tr>
<tr>
<td>RTC5519A</td>
<td>Conduct biological surveys</td>
</tr>
<tr>
<td>RTC5701A</td>
<td>Establish and maintain the enterprise OHS program</td>
</tr>
<tr>
<td>RTC5908A</td>
<td>Prepare estimates, quotes and tenders</td>
</tr>
<tr>
<td>RTC5913A</td>
<td>Collect and manage data</td>
</tr>
<tr>
<td>RTC5914A</td>
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**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 4, 5 & 6. These units must be relevant to work undertaken in Conservation and Land Management.
QUALIFICATION RULES

For a Diploma of Conservation and Land Management at least 8 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.

Diploma of Conservation and Land Management (specialising in vertebrate pest management)

A total of 10 units of competency must be completed.

- Select 4 units from Group A below.
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

<table>
<thead>
<tr>
<th>GROUP A</th>
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<tbody>
<tr>
<td>BSBMGT503A</td>
<td>Prepare budgets and financial plans</td>
</tr>
<tr>
<td>PSPPOLD501A</td>
<td>Develop organisation policy</td>
</tr>
<tr>
<td>RTD5401A</td>
<td>Define the pest problem in a regional or broader context</td>
</tr>
<tr>
<td>RTD5402A</td>
<td>Develop a strategy for the management of target pests</td>
</tr>
<tr>
<td>RTD5403A</td>
<td>Develop a system for monitoring the pest management strategy</td>
</tr>
<tr>
<td>RTD5404A</td>
<td>Coordinate the pest management strategy in a regional or broader context</td>
</tr>
<tr>
<td>RTD5405A</td>
<td>Evaluate the pest management strategy</td>
</tr>
<tr>
<td>RTD5512A</td>
<td>Manage the implementation of legislation</td>
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<table>
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</tr>
<tr>
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<td>Monitor and manage business operations</td>
</tr>
<tr>
<td>RTC5519A</td>
<td>Conduct biological surveys</td>
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<tr>
<td>RTC5701A</td>
<td>Establish and maintain the enterprise OHS program</td>
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<tr>
<td>RTC5702A</td>
<td>Develop and manage a chemical use strategy</td>
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<tr>
<td>RTC5913A</td>
<td>Collect and manage data</td>
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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 4, 5 &amp; 6. These units must be relevant to work undertaken</td>
<td></td>
</tr>
</tbody>
</table>
in Conservation and Land Management.

**QUALIFICATION RULES**

For a Diploma of Conservation and Land Management at least 8 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.
RTD60102 Advanced Diploma of Conservation and Land Management

A total of 8 units of competency must be completed.

- Select 2 units from Group A below.
- Select 4 additional units from Group A and/or B below.
- Select 2 additional units from Group A, B and/or C below.

**GROUP A**

<table>
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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>BSBHR604A</td>
<td>Manage employee relations</td>
</tr>
<tr>
<td>BSBMGT610A</td>
<td>Manage environmental management systems</td>
</tr>
<tr>
<td>RTD6502A</td>
<td>Review management plans and strategies</td>
</tr>
<tr>
<td>RTD6504A</td>
<td>Coordinate the preparation of a regional resource management plan</td>
</tr>
<tr>
<td>RTD6505A</td>
<td>Map regional issues and stakeholders</td>
</tr>
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</table>

**GROUP B**

**WORKING WITH PEOPLE**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTD6801A</td>
<td>Manage cultural processes in an Indigenous organisation</td>
</tr>
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</table>

**ADMINISTRATION AND BUSINESS**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSBMGT504A</td>
<td>Manage budgets and financial plans</td>
</tr>
<tr>
<td>BSBMGT603A</td>
<td>Review and develop business plans</td>
</tr>
<tr>
<td>PSPPOLI601A</td>
<td>Manage policy implementation</td>
</tr>
<tr>
<td>PUAFIR601A</td>
<td>Develop and administer enterprise policy, procedures and practices</td>
</tr>
<tr>
<td>RTD6902A</td>
<td>Monitor projects in a program</td>
</tr>
</tbody>
</table>

**GROUP C**

This group includes other units of competency from Conservation and Land Management and/or other Training Packages at nominal AQF Levels 5 & 6. These units must be relevant to work undertaken in Conservation and Land Management.

**QUALIFICATION RULES**

For an Advanced Diploma of Conservation and Land Management at least 6 of the units of competency presented for this qualification must relate to conservation and land management work procedures, activities or contexts.
Assessment Guidelines

Introduction
These Assessment Guidelines provide the endorsed framework for assessment of units of competency in this Training Package. They are designed to ensure that assessment is consistent with the Australian Quality Training Framework (AQTF) Standards for Registered Training Organisations. Assessments against the units of competency in this Training Package must be carried out in accordance with these Assessment Guidelines.

Assessment System Overview
This section provides an overview of the requirements for assessment when using this Training Package, including a summary of the AQTF requirements; licensing/registration requirements; and assessment pathways.

Benchmarks for Assessment
Assessment within the National Training Framework is the process of collecting evidence and making judgements about whether competency has been achieved to confirm whether an individual can perform to the standards expected in the workplace, as expressed in the relevant endorsed unit of competency.

In the areas of work covered by this Training Package, the endorsed units of competency are the benchmarks for assessment. As such, they provide the basis for nationally recognised Australian Qualifications Framework (AQF) qualifications and Statements of Attainment issued by Registered Training Organisations (RTOs).

Australian Quality Training Framework Assessment Requirements
Assessment leading to nationally recognised AQF qualifications and Statements of Attainment in the vocational education and training sector must meet the requirements of the AQTF as expressed in the Standards for Registered Training Organisations.

The Standards for Registered Training Organisations can be downloaded from the DEST website at www.dest.gov.au or can be obtained in hard copy from DEST. The following points summarise the assessment requirements under the AQTF.

Registration of Training Organisations
Assessment must be conducted by, or on behalf of, an RTO formally registered by a State or Territory Registering/Course Accrediting Body in accordance with the Standards for Registered Training Organisations. The RTO must have the specific units of competency and/or AQF qualifications on its scope of registration. See Section 1 of the Standards for Registered Training Organisations.

Quality Training and Assessment
Each RTO must have systems in place to plan for and provide quality training and assessment across all its operations. See Standard 1 of the Standards for Registered Training Organisations.

Assessor Competency Requirements
Each person involved in training, assessment or client service must be competent for the functions they perform. See Standard 7 of the Standards for Registered Training Organisations for assessor competency requirements. Standard 7 also specifies the competencies that must be held by trainers.
Assessment Requirements
The RTO's assessments must meet the requirements of the endorsed components of Training Packages within its scope of registration. See Standard 8 of the Standards for Registered Training Organisations.

Assessment Strategies
Each RTO must identify, negotiate, plan and implement appropriate learning and assessment strategies to meet the needs of each of its clients. See Standard 9 of the Standards for Registered Training Organisations.

Mutual Recognition
Each RTO must recognise the AQF qualifications and Statements of Attainment issued by any other RTO. See Standard 5 of the Standards for Registered Training Organisations.

Access and Equity and Client Services
Each RTO must apply access and equity principles, provide timely and appropriate information, advice and support services that assist clients to identify and achieve desired outcomes. This may include reasonable adjustment in assessment. See Standard 6 of the Standards for Registered Training Organisations.

Partnership Arrangements
RTOs must have, and comply with, written agreements with each organisation providing training and/or assessment on its behalf. See Standard 1.6 of Standards for Registered Training Organisations.

Recording Assessment Outcomes
Each RTO must have effective administration and records management procedures in place, and must record AQF qualifications and Statements of Attainment issued. See Standards 4 and 10.2 of the Standards for Registered Training.

Issuing AQF Qualifications and Statement of Attainment
Each RTO must issue AQF qualifications and Statements of Attainment that meet the requirements of the AQF Implementation Handbook and the endorsed Training Packages within the scope of its registration. An AQF qualification is issued once the full requirements for a qualification, as specified in the nationally endorsed Training Package are met. A Statement of Attainment is issued where the individual is assessed as competent against fewer units of competency than required for an AQF qualification. See Standard 10 and Section 2 of the Standards for Registered Training Organisations.

Pathways
The competencies in this Training Package may be attained in a number of ways including through:

- formal or informal education and training
- experiences in the workplace
- general life experience, and/or
- any combination of the above.

Assessment under this Training Package leading to an AQF qualification or Statement of Attainment may follow a learning and assessment pathway, an assessment-only or recognition pathway, or a combination of the two as illustrated in the following diagram.
Each of these assessment pathways leads to full recognition of competencies held - the critical issue is that the candidate is competent, not how the competency was acquired.

Assessment, by any pathway, must comply with the assessment requirements set out in the *Standards for Registered Training Organisations*.

**Learning and Assessment Pathways**

Usually, learning and assessment are integrated, with assessment evidence being collected and feedback provided to the candidate at anytime throughout the learning and assessment process.

Learning and assessment pathways may include structured programs in a variety of contexts using a range of strategies to meet different learner needs. Structured learning and assessment programs could be: group-based, work-based, project-based, self-paced, action learning-based; conducted by distance or e-learning; and/or involve practice and experience in the workplace.

Learning and assessment pathways to suit New Apprenticeships have a mix of formal structured training and structured workplace experience with formative assessment activities through which candidates can acquire and demonstrate skills and knowledge from the relevant units of competency.

**Assessment-Only or Recognition of Prior Learning Pathway**

Competencies already held by individuals can be formally assessed against the units of competency in this Training Package, and should be recognised regardless of how, when or where they were achieved.

In an assessment-only or Recognition of Prior Learning (RPL) pathway, the candidate provides current, quality evidence of their competency against the relevant unit of competency. This process may be directed by the candidate and verified by the assessor, such as in the compilation of portfolios; or directed by the assessor, such as through observation of workplace performance and skills application, and oral and/or written assessment. Where the outcomes of this process indicate that the candidate is competent, structured training is not required. The RPL requirements of Standard 8.2 of the *Standards for Registered Training Organisations* must be met.

As with all assessment, the assessor must be confident that the evidence indicates that the candidate is currently competent against the endorsed unit of competency. This evidence may take a variety of forms and might include certification, references from past employers, testimonials from clients, and work samples. The onus is on candidates to provide sufficient evidence to satisfy assessors that they currently hold the relevant competencies. In judging evidence, the assessor must ensure that the evidence of prior learning is:
• authentic (the candidate's own work)
• valid (directly related to the current version of the relevant endorsed unit of competency)
• reliable (shows that the candidate consistently meets the endorsed unit of competency)
• current (reflects the candidate's current capacity to perform the aspect of the work covered by the endorsed unit of competency), and
• sufficient (covers the full range of elements in the relevant unit of competency and addresses the four dimensions of competency, namely task skills, task management skills, contingency management skills, and job/role environment skills).

The assessment only or recognition of prior learning pathway is likely to be most appropriate in the following scenarios:

• candidates enrolling in qualifications who want recognition for prior learning or current competencies
• existing workers
• individuals with overseas qualifications
• recent migrants with established work histories
• people returning to the workplace, and
• people with disabilities or injuries requiring a change in career.

**Combination of Pathways**

Where candidates for assessment have gained competencies through work and life experience and gaps in their competence are identified, or where they require training in new areas, a combination of pathways may be appropriate.

In such situations, the candidate may undertake an initial assessment to determine their current competency. Once current competency is identified, a structured learning and assessment program ensures that the candidate acquires the required additional competencies identified as gaps.

**Assessor Requirements**

This section identifies the mandatory competencies for assessors, and clarifies how others may contribute to the assessment process where one person alone does not hold all the required competencies.

**Assessor Competencies**

The Standards for Registered Training Organisations specify mandatory competency requirements for assessors. For information, Standard 7.3 from the Standards for Registered Training Organisations follows:
7.3 a The RTO must ensure that assessments are conducted by a person who has:

- the following competencies from the Training Package for Assessment and Workplace Training, or demonstrated equivalent competencies:
  - TAAASS401A Plan and organise assessment;
  - TAAASS402A Assess competence;
  - TAAASS404A Participate in assessment validation;
- relevant vocational competencies, at least to the level being assessed.

b However, if a person does not have all of the competencies in Standards 7.3 a (i) and the vocational competencies as defined in 7.3 a (ii), one person with the competencies listed in Standard 7.3 a (i), and one or more persons who have the competencies listed in Standard 7.3 a (ii) may work together to conduct assessments.

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**Designing Assessment Tools**

This section provides an overview on the use and development of assessment tools.

**Use of Assessment Tools**

Assessment tools provide a means of collecting the evidence that assessors use in making judgements about whether candidates have achieved competency.

There is no set format or process for the design, production or development of assessment tools. Assessors may use prepared assessment tools, such as those specifically developed to support this Training Package, or they may develop their own.

**Using Prepared Assessment Tools**

If using prepared assessment tools, assessors should ensure these are benchmarked, or mapped, against the current version of the relevant unit of competency. This can be done by checking that the materials are listed on the National Training Information Service (http://www.ntis.gov.au). Materials on the list have been noted by the National Training Quality Council as meeting their quality criteria for Training Package support materials.

**Developing Assessment Tools**

When developing assessment tools, assessors must ensure that they:

- are benchmarked against the relevant unit or units of competency
- are reviewed as part of the validation of assessment strategies as required under 9.2 (i) of the Standards for Registered Training Organisations
- meet the assessment requirements expressed in the Standards for Registered Training Organisations, particularly Standards 8 and 9.

A key reference for assessors developing assessment tools is TAA04 Training and Assessment Training Package and the unit of competency TAAASS403A Develop assessment tools. There is no set format or process for the design, production or development of assessment materials.
Conducting Assessment

This section details the mandatory assessment requirements and provides information on equity in assessment including reasonable adjustment.

Mandatory Assessment Requirements

Assessments must meet the criteria set out in Standard 8 from the Standards for Registered Training Organisations. For information, Standard 8 from the Standards for Registered Training Organisations is reproduced below.

### 8 RTO Assessments

The RTO's assessments meet the requirements of the endorsed components of Training Packages and the outcomes specified in accredited courses within the scope of its registration.

#### 8.1 The RTO must ensure that assessments (including RPL):

i. comply with the assessment guidelines included in the applicable nationally endorsed Training Packages or the assessment requirements specified in accredited courses;

ii. lead to the issuing of a statement of attainment or qualification under the AQF when a person is assessed as competent against nationally endorsed unit(s) of competency in the applicable Training Package or modules specified in the applicable accredited course;

iii. are valid, reliable, fair and flexible;

iv. provide for applicants to be informed of the context and purpose of the assessment and the assessment process;

v. where relevant, focus on the application of knowledge and skill to standard of performance required in the workplace and cover all aspects workplace performance, including task skills, task management skills, contingency management skills and job role environment skills;

vi. involve the evaluation of sufficient evidence to enable judgements to be made about whether competency has been attained;

vii. provide for feedback to the applicant about the outcomes of the assessment process and guidance on future options in relation to those outcomes;

viii. are equitable for all persons, taking account of individual needs relevant to the assessment; and

ix. provide for reassessment on appeal.

#### 8.2

a The RTO must ensure that RPL is offered to all applicants on enrolment

b The RTO must have an RPL process that:

i. is structured to minimise the time and cost to applicants; and

ii. provides adequate information, support and opportunities for participants to engage in the RPL process.
Access and Equity

An individual's access to the assessment process should not be adversely affected by restrictions placed on the location or context of assessment beyond the requirements specified in this Training Package.

Reasonable adjustments can be made to ensure equity in assessment for people with disabilities. Adjustments include any changes to the assessment process or context that meet the individual needs of the person with a disability, but do not change competency outcomes. Such adjustments are considered 'reasonable' if they do not impose an unjustifiable hardship on a training provider or employer. When assessing people with disabilities, assessors are encouraged to apply good practice assessment methods with sensitivity and flexibility.

Assessor Requirements

Assessors must hold formal recognition of competence in the following units from the Training Package for Assessment and Workplace Training [BSZ98]: Plan Assessment (BSZ401A), Conduct Assessment (BSZ402A) and Review Assessment (BSZ403A). They must also be competent (and where possible hold formal recognition of competence), in the specific units of competency.

Registered Training Organisations issuing Qualifications and Statements of Attainment under this Training Package must meet the requirement to use qualified Assessors, and ensure that all assessments are conducted in accordance with the procedures outlined in Section Four.

All Assessors who are engaged in assessing against this Training Package must be either:

- employed by an RTO, or
- acting under the registration of an RTO (e.g., an Assessor working in an enterprise which has a partnership arrangement with a private or public RTO).

Designing Assessment Tools

Assessment Tools assist Assessors in the collecting and evaluating of evidence when making judgements about whether candidates have achieved competency. If using prepared materials, Assessors should ensure that the materials are "noted" materials which have met quality criteria as determined by ANTA. A key reference for Assessors engaged in developing Assessment Tools is the unit of competency BSZ507A Develop Assessment Tools.

Conducting Assessments

The industry-preferred process for conducting assessments is based on eight steps:

- Step 1 - Establish the assessment context
- Step 2 - Prepare the candidate
- Step 3 - Plan and prepare the evidence gathering process
- Step 4 - Collect the evidence and make the assessment decision
- Step 5 - Provide feedback on the assessment
- Step 6 - Record and report the result
- Step 7 - Review the assessment process
- Step 8 - Participate in the reassessment and appeals process

Assessors will need to be aware of, and in some cases possess, licences and permits to not only effectively carry out the assessment, but to protect themselves professionally.

Environmental and industry best practice, profitability and sustainability are themes that have been incorporated into the Conservation and Land Management Training Package and are essential components of the assessment process.
Where high levels of language, literacy and numeracy are not integral to successful completion of a work function (i.e. competency standard), the Assessor should provide options for determining a person's competence.

The Assessor's role is not to evaluate the language, literacy and numeracy skills of the individual, but to judge whether they are able to perform the required work function to a workplace standard as defined by the competency standards.

In Conservation and Land Management, Occupational Health and Safety (OHS) is an integral part of every work function. When assessing an individual, consideration must be made of the OHS aspects of evidence tendered for assessment.

When assessing people with different cultural backgrounds, Assessors will need to be aware of cultural protocols and approaches that will help facilitate the assessment process. These protocols may apply not only in Indigenous communities but also in groups of different ethnic backgrounds.

Further Sources

A comprehensive list of resources and organisations is provided to assist Assessors in the planning, design, conduct and review of assessments undertaken against the Conservation and Land Management Training Package.

Introduction

These Assessment Guidelines describe the assessment arrangements for determining whether an individual has achieved the units of competency and associated qualifications identified in the Conservation and Land Management Training Package.

These Guidelines are designed to ensure that these arrangements are consistent with the Australian Quality Training Framework (AQTF) and facilitate valid, reliable, flexible and fair assessment processes and outcomes.

The Assessment Guidelines comprise five sections. These are:

Section 1: Assessment system overview

Section 2: Assessor requirements

Section 3: Designing assessment resources

Section 4: Conducting assessment

Section 5: Further sources.

Section 1 - Assessment System Overview

Benchmarks for Assessment

Assessment within the National Training Framework is the process of collecting evidence and making judgements about whether competency has been achieved. As such, the purpose of assessment is to confirm that an individual can perform to the standards expected in the workplace, as expressed in the competency standards contained in this Training Package.

When conducting assessments, Assessors must be familiar with the full text of the unit(s) of competency being assessed. In particular Assessors must ensure that the assessment arrangements:

- cover all elements of the unit of competency being assessed,
- address the four dimensions of competency, namely: task skills, task management skills, contingency management skills and job/role environment skills,
- are consistent with the Evidence Guide for the relevant unit of competency, as this specifies the context of assessment, the required underpinning knowledge and skills, and the identification of
Key Competencies and their performance level.

Role of Registered Training Organisations (RTOs)

Assessment for national recognition purposes under this Training Package must be conducted or auspiced by a Registered Training Organisation (RTO) acting in accordance with the Australian Quality Training Framework (AQTF), and the quality assurance arrangements approved by the State or Territory Recognition Authority under which the RTO is registered.

RTOs must ensure that the units of competency or qualifications identified in this Training Package are included in their scope of registration in order to issue nationally recognised qualifications under the Australian Qualifications Framework.

Where RTOs do not deliver a complete qualification, the scope of registration is to reflect this, and only the units of competency for which they are registered are to appear in their scope. In these situations, RTOs would issue Statements of Attainment to candidates listing those units for which the RTO is registered and which have been successfully completed and assessed.

RTOs are registered on the basis that they can meet the requirements of registration for the scope they are seeking as defined by the AQTF standards. Continuing registration is based on demonstration of compliance with these standards.

RTOs may be public or private organisations and may provide both on- and/or off-the-job training and/or assessment. The role of the RTO in assessment is to:

- comply with the Assessment Guidelines included in the applicable Training Package,
- lead to the issuing of a Statement of Attainment or qualification under the AQF when a person is assessed as competent against nationally endorsed unit(s) of competency in the applicable Training Package,
- comply with the principles of validity, reliability, fairness and flexibility,
- provide for applicants to be informed of the context and purpose of the assessment and the assessment process,
- where relevant, focus on the application of knowledge and skill to the standard of performance required in the workplace and cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills,
- involve the evaluation of sufficient evidence to enable judgements to be made about whether competency has been attained,
- provide feedback to the applicant about the outcomes of the assessment process and guidance on future options,
- are equitable for all persons, taking account of cultural and linguistic needs, and
- provide for re-assessment on appeal.

The RTO must also ensure that a process for Recognition of Prior Learning (PRL) is offered to all applicants on enrolment that:

- is structured to minimise the time and cost to applicants, and
- provides adequate information and support to enable applicants to gather reliable evidence to support their claim for recognition of competencies currently held, regardless of how, when or where the learning occurred.

Mutual Recognition

All Registered Training Organisations throughout Australia must ensure that they recognise and offer credit for the assessment outcomes of all other Registered Training Organisations. This is regardless of whether assessment was conducted through training and assessment or assessment only pathways.

Partnership Arrangements
Under the Australian Quality Training Framework (AQTF), Registered Training Organisations (RTOs) may enter into arrangements with non-registered organisations (such as schools, industry organisations, government agencies and business enterprises), for the purposes of conducting assessments against qualifications within the RTOs scope of registration.

There are two broad types of arrangements that may be established. These are where:

- assessment is managed and conducted by the RTO on behalf of the non-registered organisation and
- assessment is managed by the RTO and conducted by Assessors from the non registered organisation under quality assurance arrangements established by the RTO. Assessors from a non-registered organisation must also comply with the AQTF and Assessor requirements detailed in Section Two.

While Training Organisations registered for skill recognition (assessment only) services may establish partnership arrangements for assessment, these arrangements do not extend to the provision of training.

**Recording Assessment Outcomes**

The RTO that issues the Qualification or Statement of Attainment is responsible for the retention, archiving, retrieval and accessibility of a student's assessment outcomes for the duration specified by the AQTF standards. This responsibility applies to all assessments undertaken for national recognition purposes.

Where the RTO has a formal agreement with another organisation to provide training and/or assessment under the name of the RTO, that agreement will specify how the RTO will discharge its responsibility for ensuring the quality of the training and/or assessment conducted on its behalf. The RTO maintains a register of all such agreements.

**Reporting Assessment Outcomes**

Statements of Attainment and Qualifications issued under the Australian Quality Training Framework (AQTF) must comply with the relevant provisions in the current *Australian Quality Training Framework Implementation Handbook*.

The RTO will issue a qualification once the full package of competencies specified for the relevant qualification has been achieved. If an individual leaves the training or skills recognition process before completing the full complement of competencies required to attain the qualification, he/she will receive a Statement of Attainment for work completed and assessed to date.

**Quality Assurance Mechanisms**

Registered Training Organisations involved in the assessment of the Units of Competency and Qualifications within the Conservation and Land Management Training Package are required to develop and maintain a quality assurance framework for assessment. All quality assurance mechanisms should be in line with the requirements for the registration of RTOs and other relevant arrangements as approved by the respective State/Territory Recognition Authority.

However, it is **recommended** that RTOs include the following procedures within a quality assurance framework:

- establishment of a standard procedure for the selection of Assessors,
- conduct of regular professional development for Assessors,
- ongoing recording, monitoring and review of the assessment process including the assessment plan, assessment outcomes and participant feedback,
- development of a comprehensive bank of resources for participants and Assessors including:
  - information about the assessment process
  - assessment instruments where appropriate
Assessment Pathways

Assessment of an individual's competence against the Conservation and Land Management Training Package leads to the issuing of a nationally recognised Qualification and/or Statement of Attainment under the Australian Quality Training Framework (AQTF). The Conservation and Land Management Training Package incorporates a number of assessment pathways that lead to the recognition of competencies and the issuing of a Qualification or Statement of Attainment. These pathways are illustrated in the following diagram.

As shown above, the Training Package incorporates three broad pathways to nationally recognised Qualifications and Statements of Attainment. These are:

Assessment Only Pathways that occur where assessment is conducted independently of a structured training program. This can occur in on- and off-job situations through an RPL (Recognition of Prior Learning) process. Common examples include:

- industry workers seeking formal recognition of their skills,
- individuals with overseas qualifications and,
- recent migrants with established work histories.

In assessment only situations, the candidate presents evidence to the Assessor that he or she possesses skills and knowledge that meet relevant competency standards. Evidence can include the compilation of portfolios, demonstration of workplace performance, submission of appropriate documentation, and oral and/or written testing.

Training and Assessment Pathways occur where an individual undertakes a structured program of training and assessment in a mix of on- and off-job environments. These pathways are particularly suited to traineeships where there is a mix of formal training and structured workplace experience. In this situation, training and assessment can be integrated, and assessment evidence is collected and feedback is provided to the candidate on an on-going basis.

Note that at the commencement of structured training programs, all students should be provided with the opportunity to have their prior learning recognised so that training programs can be customised to suit individual training needs and to reduce inefficiencies in unnecessary repetition of training.

In some situations, an individual who has completed an 'assessment only' pathway will be motivated to enrol in a structured 'training and assessment' pathway in order to meet identified training needs or personal aspirations.

Both assessment pathways lead to full recognition under the Australian Qualifications Framework. An individual's access to the assessment process should not be adversely affected by restrictions on the location or context of assessment which are not supported by the requirements specified in this
Training Package.

Recognition of Prior Learning (RPL)

Skills and knowledge in conservation and land management can be attained in a number of ways including:

- formal or informal training and education,
- work experience,
- general life experience,
- any combination of the above.

All assessment pathways in the Conservation and Land Management Training Package must provide for the recognition of competencies of individuals regardless of how, when or where they were achieved.

When assessing evidence, the Assessor must determine whether the candidate is currently competent against the endorsed Conservation and Land Management competency standards. Evidence may take a variety of forms such as certification, references from past employers, testimonials from clients and work samples.

The onus is on the candidate to provide sufficient evidence for the Assessor to make a judgement that standards have been met. The Assessor must ensure that the evidence presented is:

- authentic (evidence presented by the candidate is his or her own work),
- valid (evidence is directly related to the current version of the relevant endorsed competency standards),
- reliable (evidence shows that the candidate consistently meets the standards),
- current (evidence reflects the candidate's current capacity to perform the aspect of the work covered by the standards),
- sufficient (evidence of prior learning covers the full range of elements in the relevant unit of competency and addresses the four dimensions of competency, namely:
  - task skills
  - task management skills
  - contingency management skills
  - job / role environment skills).

Under the Conservation and Land Management Training Package, individuals who are able to present sufficient evidence of prior learning must be given recognition for the relevant units of competency by the RTO.

Review and Maintenance of the Assessment System

The Rural Training Council of Australia is responsible for the ongoing monitoring and review of the Assessment Guidelines detailed in this document. This process will be incorporated in the general review and maintenance of this Training Package. Any review will ensure that these Assessment Guidelines:

- continue to meet the requirements of the industry,
- are consistent with the AQTF standards for RTOs and the relevant policy and procedures of appropriate State and Territory Training / Recognition Authorities,
- promote confidence in the system and the assessment outcomes on the part of industry, employers, enterprises, unions, employees, trainees, Assessors and trainers,
- ensure assessment processes and outcomes are valid, reliable, fair and flexible,
- support RTOs to effectively carry out their responsibilities.

Section 2 - Assessor Requirements
Assessments against the competency standards in the Conservation and Land Management Training Package will be carried out in accordance with these endorsed guidelines. The guidelines identify the necessary minimum qualifications for those conducting assessments and provide for those situations where more than one person may contribute to the assessment, and where any one person may not hold all the required technical and assessment competencies.

**Assessor Qualifications**

The following mandatory requirements must be met by individual Assessors or collectively between the members of an assessment team/panel conducting assessments against this Training Package:

- As a minimum, hold formal recognition of competence in the following units from the Training Package for Assessment and Workplace Training [BSZ98]:
  - Plan Assessment (BSZ401A)
  - Conduct Assessment (BSZ402A)
  - Review Assessment (BSZ403A).
- Be competent (and where possible hold formal recognition of competence) in the specific units of competency at least to the level to be assessed, or at a higher level (e.g. chemical use) where specified in the respective competency standard.

In addition to the above it is **recommended** that Assessors:

- Demonstrate comprehensive current knowledge of the industry, industry practices, and the job or role against which performance is being assessed. This may be demonstrated through evidence of one or more of the items below:
  - relevant work experience,
  - attendance at professional development/training and education activities focusing on good practice in the relevant industry competencies,
  - participation in professional/industry networks.
- Demonstrate current knowledge and skill in assessing against the Conservation and Land Management Training Package in a range of contexts. This may be demonstrated through at least one of the following:
  - familiarity with the competency standards in this Training Package to be used by the candidate as a basis of assessment,
  - recent planning, conduct and review of assessment and/or workplace training activities,
  - participation in moderation/validation processes,
  - attendance in professional development activities focused on assessment and/or workplace training,
  - understanding of the requisite Assessor qualifications within this Training Package.
- Demonstrate the necessary interpersonal and communication skills required in the assessment process. This may be demonstrated through evidence of one or more of the following:
  - attendance in professional development and/or training activities focused on effective communication in assessment and/or workplace training contexts,
  - knowledge of language, literacy and numeracy issues in the context of assessment and workplace training,
  - recent assessment and/or workplace training activities.

**Gaining Formal Recognition as an Assessor**

Formal recognition of competency against the Units of Competency from the Training Package for Assessment and Workplace Training and the relevant Units of Competency in this Training Package may be gained through the successful completion of:

- a recognised training program offered by a Registered Training Organisation that is based on delivery against the relevant Units of Competency, and/or
• a recognition of prior learning process offered by a Registered Training Organisation for the relevant Units of Competency.

Using Qualified Assessors

Registered Training Organisations issuing Qualifications and Statements of Attainment under this Training Package must meet the requirement to use qualified Assessors and ensure that all assessments are conducted in accordance with the procedures outlined in Section Four.

All Assessors who are engaged in assessing against this Training Package must be either:

• employed by an RTO, or
• acting under the registration of an RTO (e.g. an Assessor working in an enterprise which has a partnership arrangement with a private or public RTO).

This Training Package provides a range of options for meeting these Assessor requirements. The options allow assessments to be undertaken by individual Assessors, partnerships involving Assessors and technical experts, and Assessors working in team situations in a variety of workplace and institutional contexts. The following table outlines the different ways that the requirement to use qualified Assessors may be met.

<table>
<thead>
<tr>
<th>OPTIONS</th>
<th>ASSESSORS, TECHNICAL EXPERTS AND WORKPLACE SUPERVISORS</th>
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<tbody>
<tr>
<td>Single Assessor</td>
<td>The Assessor is <strong>required</strong> to:</td>
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<tr>
<td>(An individual Assessor conducts the assessment)</td>
<td>• hold formal recognition of competence in the relevant units in the Training Package for Assessment and Workplace Training.</td>
</tr>
<tr>
<td></td>
<td>• be deemed competent, and where possible, hold formal recognition of competence in the specific units of competency from this Training Package, at least to the level being assessed.</td>
</tr>
<tr>
<td></td>
<td>In addition, it is <strong>recommended</strong> that the Assessor is able to:</td>
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<tr>
<td></td>
<td>• demonstrate current knowledge of the industry, industry practices, and the job or role against which performance is being assessed.</td>
</tr>
<tr>
<td></td>
<td>• demonstrate current knowledge and skill in assessing against the Conservation and Land Management Training Package in a range of contexts.</td>
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<tr>
<td></td>
<td>• demonstrate the necessary interpersonal and communication skills required in the assessment process.</td>
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| Partnership arrangement       | The Assessor is **required** to:                       |
| (An Assessor works with a technical expert to conduct the assessment) | • hold formal recognition of competence in the relevant units in the Training Package for Assessment and Workplace Training. |
|                               | In addition, it is **recommended** that the Assessor is able to: |
|                               | • demonstrate the necessary interpersonal and communication skills required in the assessment process. |
|                               | • demonstrate current knowledge and skill in assessing against this Training Package in a range of contexts. |
|                               | The technical expert is **required** to:              |
|                               | • be deemed competent, and where possible, hold formal recognition of competence in the specific units of competency in conservation and land management, at least to the level being assessed. |
In addition, it is **recommended** that the Technical Expert is able to:

- demonstrate current knowledge of the industry, industry practices, and the job or role against which performance is being assessed.
- communicate and liaise with Assessor throughout assessment process.

| Assessor and workplace supervisor (Assessor works with a workplace supervisor in collecting evidence for valid assessment) | The Assessor is **required** to:
| --- | --- |
|  | • hold formal recognition of competence in the relevant units in the Training Package for Assessment and Workplace Training.
- make the assessment decision. |
| In addition, it is **recommended** that the Assessor is able to:
- demonstrate the necessary interpersonal and communication skills required in the assessment process.
- demonstrate current knowledge and skill in assessing against this Training Package in a range of contexts.
- communicate and liaise where appropriate with the workplace supervisor throughout the assessment process. |
| The workplace supervisor is **required** to:
- be deemed competent, and where possible, hold formal recognition of competence in the specific units of competency from this Training Package, at least to the level being assessed. |
| In addition, it is **recommended** that the workplace supervisor is able to:
- demonstrate current knowledge of the industry, industry practices, and the job or role against which performance is being assessed.
- communicate and liaise where appropriate with the Assessor throughout the assessment process.
- use agreed practices to gather and record evidence for the Assessor to make a valid judgement on competency. |

| Assessment team/panel (A team working together to conduct the assessment) | A team which comprises assessment and industry experience and expertise which works together in the collection of evidence and making judgements about competency. The members of the team **must** include at least one person who:
| --- | --- |
|  | • holds formal recognition of competence in the relevant units in the Training Package for Assessment and Workplace Training.
- is deemed competent, and where possible, hold formal recognition of competence in the specific units of competency from this Training Package, at least to the level being assessed. |
| In addition, it is **recommended** that members of the team/panel combined and involved in the assessment are able to:
- demonstrate current knowledge of the industry, industry practices, and the job or role against which performance is being assessed.
- demonstrate current knowledge and skill in assessing against this Training Package in a range of contexts.
- demonstrate the necessary interpersonal and communication skills required in the assessment process and liaise with other team/panel members throughout the assessment process. |
Section 3 - Designing Assessment Tools

Assessment Tools assist Assessors in the collecting and evaluating of evidence when making judgements about whether candidates have achieved competency. Assessors may use prepared Assessment Tools, such as specifically developed support materials, or Assessors may develop their own Assessment Tools to meet the needs of their clients.

If using prepared materials, Assessors should ensure that the materials are "noted" materials which have met quality criteria as determined by ANTA. These are listed on the National Training Information Service website (www.ntis.gov.au).

If developing Assessment Tools, Assessors must ensure that they are:

- Benchmarked against the selected unit(s) of competency in this Training Package.
- Validated to ensure that Assessors can gather sufficient, valid and reliable information to make assessment decisions against the competency standards.
- In compliance with the standards for Registered Training Organisations.

A key reference for Assessors engaged in developing Assessment Tools is the Training Package for Assessment and Workplace Training [BSZ98], and particularly the unit of competency titled, Develop Assessment Tools (BSZ507A). There is no set format or process for the design, production or development of Assessment Tools. However, the following seven-step process that is based on the unit of competency, Develop Assessment Tools (BSZ507A), provides a general approach to the design and development of such materials.

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<thead>
<tr>
<th>Select the units of competency to be assessed</th>
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<tr>
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<tr>
<td>Analyse the units of competency</td>
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<tr>
<td>Identify the type and amount of evidence to be collected</td>
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<tr>
<td>Plan the assessment activities</td>
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<tr>
<td>Prepare the Assessment Tools</td>
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<tr>
<td>Validate the Assessment Tools</td>
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<tr>
<td>Prepare the final version of the Assessment Tools and recording materials</td>
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</table>

Step 1. Select the unit(s) of competency to be assessed

Identify the units of competency that are to be assessed. Assessment Tools may focus on either a single
unit of competency or a cluster of related units of competency.

**Step 2. Analyse the unit of competency**

The unit of competency describes the work and the required standards of performance. Read the full unit of competency carefully and familiarise yourself with the:

- **Unit Descriptor** - this outlines the aspect of work to be assessed.
- **Elements and Performance Criteria** - these describe the nature of the task to be assessed and the standard of performance that is expected of the candidate.
- **Range of Variables** - these describe the contexts under which the task should be able to be performed.
- **Evidence Guide** - this provides information on the underpinning knowledge and skills required to perform the task.

Identify the key skills that the candidate will require to perform the work activity described in the unit of competency. These are:

- **Task Skills** - these involve performing the task to the required standard as described in the unit of competency.
- **Task Management Skills** - these involve managing a number of different tasks within the job.
- **Contingency Management Skills** - these involve responding to problems, breakdowns and changes in routine.
- **Job/Role Environment Skills** - these involve fulfilling the responsibilities and expectations of the workplace.

**Step 3. Identify the type and amount of evidence to be collected**

Prepare a list of the evidence that might be collected to show that the candidate is able to perform the work activity described in the unit of competency. There are three broad categories of assessment evidence that may be used in conducting competency assessments. These are:

- **Product** - this refers to an item that is constructed or a service that is delivered.
- **Process** - this refers to the way in which a product is produced or achieved.
- **Knowledge** - this refers to the information that is required to perform the aspect of work described in the units of competency. This may include knowledge of specific information, knowledge of specific laws, regulations and Codes of Practice, and knowledge of principles, processes and procedures.

Evidence should be collected through a variety of methods. These include:

- Observation - observation of workplace activities, demonstration of specific tasks, observation of activities under simulated workplace conditions and/or observation of role-play.
- Questioning - oral questioning, written tests and/or interviews.
- Supplementary Evidence - supervisor reports, employer references, documentation about past or prior achievements and/or portfolios.

The Assessor must determine the type and amount of evidence that is required and how this will be collected.

**Step 4. Plan the assessment activities**

Prepare a brief written description of the assessment activities that will be used to collect the required evidence. This assessment plan should be discussed with the candidate prior to assessment taking place. This plan may include observation of a workplace activity, assessment of a product or workplace process, a role-play simulation, questioning, or some other form of evidence gathering technique. The description does not have to be detailed but should at least describe, in broad terms, the nature of the activity to be undertaken. The assessment plan should detail the:
• type of evidence gathering (e.g. observation, questioning, supplementary evidence),
• tasks which the candidate is required to do,
• location of the assessment activity (i.e. on- or off-job),
• time allocated to the activity,
• who will be involved in the assessment process,
• any assessment considerations in regard to "reasonable adjustment" for candidates with special needs.

In planning the activity, consideration should be given to using evidence gathering methods that:

• are appropriate to the industry context,
• are gender and culturally inclusive,
• take into account the language, literacy and numeracy skills of both the Assessor and the candidate,
• minimise the cost of assessment,
• are practical in regard to safety issues and resources required,
• involve the collection of a variety of forms of evidence,
• may be customised to take into account local conditions, site requirements and enterprise specific practices,
• utilise industry and enterprise reference materials, such as Standard Operating Procedures and Material Safety Data Sheets,
• allow for updating of evidence requirements and work practices in line with changes to legislation, regulations and Codes of Practice,
• take account of safety considerations and the assessment environment, especially for New Apprenticeship pathways, which are likely to have first time workers, and for assessment of high-risk operations or in high-risk industries.

Step 5. Prepare the assessment resources

Resources need to be developed to:

• prepare the candidate,
• carry out the assessment process,
• record outcomes of the assessment for the candidate, Assessor, trainer and the employer.

The resources for the assessment process are to be developed in accordance with the assessment plan. The assessment resources should:

• address the relevant units of competency,
• require the candidate to demonstrate the four components of competency,
• identify the evidence requirements and evidence collection methods,
• include instructions for candidates and those involved in administering the assessment activity,
• incorporate allowable reasonable adjustments to the assessment procedure.

Step 6. Validate the assessment resources

The Assessment Tools should be piloted with a small sample of Assessors. Information gathered through this process should be analysed and checked for ease of use, validity, reliability, fairness and flexibility to establish any amendments that may be required. The Assessment Tools are redrafted incorporating suggested amendments as appropriate.

Step 7. Prepare the final version of the Assessment Tools and recording resources

The Assessment Tools are published in an appropriate format, either print or electronic, and made available to Assessors within the relevant organisation. Arrangements are put in place for the ongoing maintenance and cyclic review of the assessment resource.
### Section 4 - Conducting Assessments

#### Assessment procedures

The following outline describes the industry-preferred process for conducting assessments against the competency standards in this Training Package. This process applies to all assessments conducted for the purposes of national recognition in both institutional and workplace contexts.

This process is consistent with the assessment procedure outlined in the Training Package for Assessment and Workplace Training [BSZ507A], and particularly the units titled, Plan Assessment (BSZ401A), Conduct Assessment (BSZ402A) and Review Assessment (BSZ403A).

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Establish the assessment context</th>
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<tbody>
<tr>
<td></td>
<td>The Assessor:</td>
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<tr>
<td></td>
<td>• establishes the context and purpose of the assessment.</td>
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<tr>
<td></td>
<td>• identifies the relevant competency standards, assessment guidelines and qualifications in this Training Package.</td>
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<tr>
<td></td>
<td>• identifies any Support Materials that have been developed to facilitate the assessment process.</td>
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<tr>
<td></td>
<td>• analysis the competency standards and identifies the evidence requirements.</td>
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<td></td>
<td>• identifies alternative evidence collection methods.</td>
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<table>
<thead>
<tr>
<th>Step 2</th>
<th>Prepare the candidate</th>
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<tbody>
<tr>
<td></td>
<td>The Assessor meets with the candidate to:</td>
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<tr>
<td></td>
<td>• explain the context* and purpose of the assessment and the assessment process.</td>
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<tr>
<td></td>
<td>• explain the competency standards to be assessed and the evidence to be collected.</td>
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<td></td>
<td>• advise on self-assessment including processes and criteria.</td>
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<td></td>
<td>• outline the assessment procedure, the preparation which the candidate should undertake, and answer any questions.</td>
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<td></td>
<td>• assess the needs of the candidate and negotiate reasonable adjustment for assessing people with disabilities, people from diverse backgrounds and gender differences.</td>
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<td></td>
<td>• seek feedback regarding the candidate's understanding of the competency standards, evidence requirements and assessment process.</td>
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<td></td>
<td>• determine if the candidate is ready for assessment and in consultation with the candidate, decide on the time and place of the assessment.</td>
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<td></td>
<td>• develop an assessment plan.</td>
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</tbody>
</table>

(* the industry context in which the assessment is to be conducted must be clearly defined by the Assessor and relevant to the person being assessed.)

<table>
<thead>
<tr>
<th>Step 3</th>
<th>Plan and prepare the evidence gathering process</th>
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<tbody>
<tr>
<td></td>
<td>The Assessor must:</td>
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<tr>
<td></td>
<td>• establish a plan for gathering sufficient and quality evidence about the candidate's performance in order to make the assessment decision.</td>
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<tr>
<td></td>
<td>• source or develop assessment materials to assist the evidence gathering process.</td>
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<tr>
<td></td>
<td>• organise equipment or resources required to support the evidence gathering process.</td>
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<tr>
<td>Step 4</td>
<td>Collect the evidence and make the assessment decision</td>
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<td>------------------------------------------------------</td>
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<tr>
<td>The Assessor must:</td>
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<tr>
<td>• establish and oversee the evidence gathering process to ensure its validity, reliability, fairness and flexibility.</td>
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<tr>
<td>• collect appropriate evidence and match compatibility to the Elements, Performance Criteria, Range of Variables and Evidence Guide in the relevant units of competency.</td>
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<tr>
<td>• evaluate evidence in terms of the four dimensions of competency - task skills, task management skills, contingency management skills and job/role environment skills.</td>
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<tr>
<td>• incorporate specified allowable adjustments to the assessment procedure, where appropriate.</td>
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<tr>
<td>• evaluate the evidence in terms of validity, consistency, currency, equity, authenticity and sufficiency.</td>
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<tr>
<td>• consult and work with other staff, assessment panel members or technical experts involved in the assessment process.</td>
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<tr>
<td>• record details of evidence collected.</td>
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<tr>
<td>• make a judgement about the candidate's competence based on the evidence and the relevant unit(s) of competency.</td>
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<thead>
<tr>
<th>Step 5</th>
<th>Provide feedback on the assessment</th>
</tr>
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<tbody>
<tr>
<td>The Assessor must:</td>
<td></td>
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<tr>
<td>• provide advice to the candidate about the outcomes of the assessment process. This includes providing the candidate with:</td>
<td></td>
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<tr>
<td>• clear and constructive feedback on the assessment decision.</td>
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<td>• information on ways of overcoming any identified gaps in competency revealed by the assessment.</td>
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<tr>
<td>• the opportunity to discuss the assessment process and outcome.</td>
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<tr>
<td>• information on reassessment and appeals processes.</td>
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<thead>
<tr>
<th>Step 6</th>
<th>Record and report the result</th>
</tr>
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<tbody>
<tr>
<td>The Assessor must:</td>
<td></td>
</tr>
<tr>
<td>• record the assessment outcome according to the policies and procedures of the Registered Training Organisation.</td>
<td></td>
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<tr>
<td>• maintain records of the assessment procedure, evidence collected and the outcome according to the policies and procedures of the Registered Training Organisation.</td>
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<tr>
<td>• maintain the confidentiality of the assessment outcome.</td>
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</tr>
<tr>
<td>• organise the issuance of qualifications and/or Statements of Attainment+ according to the policies and procedures of the Registered Training Organisation. + The industry context of the assessment should be indicated on the Statement of Attainment or Academic Transcript (e.g. 'Specialising in lands, parks and wildlife')</td>
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<tr>
<th>Step 7</th>
<th>Review the assessment process</th>
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<tbody>
<tr>
<td>On completion of the assessment process, the Assessor must:</td>
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<tr>
<td>• review the assessment process.</td>
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<tr>
<td>• report on the positive and negative features of the assessment to those responsible for the assessment procedures.</td>
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<tr>
<td>• make suggestions (if necessary) on improving the assessment procedures to appropriate personnel in the Registered Training</td>
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<tr>
<th>Step 8 Participate in the reassessment and appeals process</th>
<th>The Assessor must:</th>
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<tbody>
<tr>
<td></td>
<td>• provide feedback and counselling to the candidate, if required, regarding the assessment outcome or process.</td>
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<tr>
<td></td>
<td>• provide the candidate with information on the reassessment and appeals process.</td>
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<td></td>
<td>• report any assessment decision that is disputed by the candidate to the appropriate personnel in the Registered Training Organisation.</td>
</tr>
<tr>
<td></td>
<td>• participate in the reassessment or appeal according to the policies and procedures of the Registered Training Organisation.</td>
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**Licences and Permits**

The assessment of a number of competency standards will require Assessors to be aware of, and in some cases possess, licences and permits to not only effectively carry-out the assessment, but to protect themselves professionally.

Licences and permits are generally based on State and Territory legislation and therefore vary from state to state. In some instances, licences and permits are issued by local government bodies or even professional associations. Areas where licensing and permits may apply are:

- Operating vehicles on public roads.
- Operating forklifts and other specialised vehicles.
- Using chainsaws and other machinery.
- Storing and applying certain chemicals.
- Using and storing explosives.
- Possession and use of firearms.
- Trapping of animals.
- Vegetation clearance.
- Building structures.

**Environmental Issues**

Underpinning the assessment process is the notion that workplace performance should lead to viable and sustainable enterprises or organisations. This covers profitability, sustainability and observance of good industry practices. These themes have been incorporated into the revised competency standards and are therefore an essential component of the assessment process.

Many work practices in conservation and land management can have either positive or negative environmental impacts of which the Assessor should be aware, and should incorporate in judgements when assessing evidence.

For example, negative work practices can include:

- over-watering,
- overworking soil,
- overuse of chemicals and
- failure to carry out the safe disposal of chemicals, oils, greases and packaging materials.

Positive work practices can include:

- stubble retention techniques,
- effective water re-use systems and effluent disposal systems,
- fencing off areas of similar land use capabilities, and
- planting trees in re-charge areas.
Those being assessed at the higher levels are responsible for the development of processes, strategies, procedures and controls. Those at lower levels have the responsibilities to act on, observe and report on processes, strategies, procedures and controls.

Questioning strategies can be used during assessment to ascertain whether an applicant is working towards enterprise viability and sustainability and is minimising environmental impacts. Open ended questions like those below can assist in making this judgement,

- What are the main environmental issues surrounding your workplace?
- How and why do these problems occur?
- What current work practices can impact on the environment in a negative way?
- How do you minimise environmental impacts in your workplace?
- What current work practices have been adopted to limit the impact on the environment?
- How are staff informed about what constitutes good environmental practice?

Finally, evidence presented for assessment should indicate the application of good environmental practice in operational tasks, and in planning and management. Where this is not obvious, Assessors should require further evidence to be submitted that illustrates adherence to environmental principles and practices.

**Language, Literacy and Numeracy**

Conservation and Land Management competency standards have been developed to accommodate varying language, literacy and numeracy capabilities. The required levels of language, literacy and numeracy will be outlined in these standards.

Fairness in assessment means that where high levels of language, literacy and numeracy are not integral to successful completion of a work function (i.e. competency standard), the assessment should provide alternatives for determining a person's competence. For a person with low levels of language, literacy and numeracy, this could include:

- oral questioning rather than written tests or project work,
- arranging for a supervisor or colleague to assist in the evidence gathering and even the evidence interview,
- the use of signs and gestures rather than words where there exists a language barrier, and
- less reliance on written work in favour of practical demonstration and references.

In some situations it may be possible to conduct the oral part of an assessment or to assess aspects of knowledge by using a language other than English.

Where there is a requirement for basic language, literacy and numeracy such as in competency standards dealing with chemical use and application, then only the essential requirement for language, literacy and numeracy should be evaluated. For example, a person may be able to read relevant information in an operator's manual that will enable them to operate a particular machine in a safe manner and as required by the competency standard. However, it would be unfair to expect them to read and understand other written material within the manual that is not relevant to the standard.

Variations in language, literacy and numeracy can result from a range of circumstances such as culture and ethnicity, educational background, and physical, learning or intellectual disabilities.

The Assessor's role is not to evaluate the language, literacy and numeracy skills of the individual, but to judge whether they are able to perform the required work function to a workplace standard as defined by the competency standards. Making this judgement will often rely on the development of creative approaches to design techniques and tools that respect the diversity of language, literacy and numeracy skills in the workplace and training institutions.

**Occupational Health and Safety**
In conservation and land management, Occupational Health and Safety (OHS) is an integral part of every work function. This has been reflected in the competency standards for the Conservation and Land Management Training Package. When assessing an individual, consideration must be made of the OHS aspects of evidence tendered for assessment.

For example, at the lower levels, the identification of hazards and the use of Personal Protective Equipment (PPE) are essential requirements. Therefore, evidence for assessment should indicate that an individual not only performs the task as required, but also uses appropriate safety equipment and clothing and is capable of identifying hazards. While the wearing of appropriate PPE can be adjudged by observation and demonstration, the identification of hazards may require use of written or oral questioning strategies. For example,

- What things could possibly cause harm to workers in your workplace?
- What do you do when you see something that looks dangerous and may harm someone?
- How do you make sure you protect yourself from hazards in the workplace?
- What protective equipment do you use and when?

At the higher levels there is a strong focus on not only identifying hazards, but also on assessing and controlling risks (adverse outcomes associated with hazards). These risks range from death, injury and illness to financial loss and prosecution. Risk management covers facilities and equipment, planning, training, labour organisation and work practice procedures.

Evidence for assessment at the higher levels should include documentation of OHS risk assessment and management. This should be found in a range of areas including reports, business plans, OHS audits, training programs for staff, forms detailing compliance with legislation, and enterprise policies and procedures.

Questioning strategies at the higher levels should also focus on risk assessment and management. For example:

- How do you assess risks associated with workplace operations?
- What actions have you undertaken in relation to hazards identified in the workplace?
- How do you ensure that staff employed in the workplace observe OHS guidelines?
- Can you show me the OHS policies and procedures for your enterprise?

Where an individual cannot provide evidence, an Assessor may need to provide additional time for that evidence to be prepared or obtained.

**Observing Cultural Protocols in Assessment**

When assessing people with different cultural backgrounds, Assessors will need to be aware of cultural protocols and approaches that will help facilitate the assessment process. These protocols may apply not only in Indigenous communities but also in ethnic groups.

Prior to visiting a rural or remote community, the Assessor should:

- Consult with community decision-makers about the process of assessment and seek their advice on appropriate timing and place.
- Obtain approval to visit the community (this may include a permit to enter area).
- Establish a time and date for visiting.
- Confirm the visit in writing (letter, fax or email).
- Determine the person to meet on first arrival in the community. In Indigenous communities, there are often key people who should be contacted first when entering a community, such as an elder or administration officer.
- Arrange for required support, advocacy or mentoring for the person to be assessed. This may include engaging an interpreter.
- Arrange for active participation in the assessment process of a senior community person who has been identified by the community as having the necessary knowledge to deal with issues.
associated with cultural customs, sensitivities or special knowledge and is in a position to make decisions on behalf of the community. (Identifying the key decision-maker in a community requires good listening skills, observation and confirmation from the community).

- Remuneration for support in the assessment process where required.

Before visiting a community for the first time, an Assessor should determine whether there are specific rules or protocols governing culturally appropriate behaviour when on site. These could include:

- Appropriate clothing.
- Who it is appropriate to speak to.
- Building relationships before doing business including limiting use of direct questions in the early part of communications.
- Appropriate mannerisms such as listening rather than talking, levels of familiarity and the use of body language.
- Acceptable and appropriate use of language including forms of address and dealing with names of deceased persons.
- 'Saving face'.
- Approval for photographing people and places.
- Gender lines and their effect on communication and training activities.

Sometimes applicants will be shy or lack English language skills. In these cases it will be necessary to arrange for mentoring support from a supervisor, senior person or colleague to assist the applicant.

Many of the cultural protocols and approaches outlined above will also be useful for dealing with individuals from different cultural groups.

**Subject Specific Resources**

**Rural Resources**

Rural Training Council of Australia 1998, *Train to Gain- Self taught Workplace Trainer (Video).*


Rural Training Council of Australia 1999, VET Notes (Nos. 3, 4 and 5).


Primary Industry Training Advisory Board (NSW) 1999, *A Job Well Done - Rural Workplace Assessor Training Program (Video).*
Further Sources of Information

The section provides a listing of useful contacts and resources to assist assessors in planning, designing, conducting and reviewing of assessments against this Training Package.

Contacts

Australian Training Products Ltd
Level 25, 150 Lonsdale Street
MELBOURNE VIC 3000
PO Box 12211
A’Beckett Street Post Office
MELBOURNE VIC 8006
Telephone: (03) 9655 0600
Fax: (03) 9639 4684
Web: www.atpl.net.au
Email: sales@atpl.net.au

Innovation and Business Industry Skills Council
Building B, Level 2
192 Burwood Road
HAWTHORN VIC 3122
Telephone: (03) 9815 7000
Fax: (03) 9815 7001
Email: virtual@ibsa.org.au

General Resources

Refer to http://antapubs.dest.gov.au/publications/search.asp to locate the following ANTA publications.

Australian Quality Training Framework (AQTF) - for general information go to: www.dest.gov.au/sectors
Australian Quality Training Framework (AQTF) - for resources and information go to: www.dest.gov.au

Australian Quality Training Framework Standards for Registered Training Organisations, Australian National Training Authority, Melbourne, 2005. Available in hard copy from State and Territory Training Authorities or can be downloaded from www.dest.gov.au


Assessment Resources

Training Package Assessment Guides - a range of resources to assist RTOs in developing Training Package assessment materials developed by DEST with funding from the Department of Education, Training and Youth Affairs. It is made up of 10 separate titles, as described at the ANTA publications page of www.dest.gov.au. Go to www.resourcegenerator.gov.au/loadpage.asp?TPAG.htm

Printed and/or CD ROM versions of the Guides can be purchased from Australian Training Products
The resource includes the following guides:

1. Training Package Assessment Materials Kit
2. Assessing Competencies in Higher Qualifications
3. Recognition Resource
4. Kit to Support Assessor Training
5. Candidate's Kit: Guide to Assessment in New Apprenticeships
6. Assessment Approaches for Small Workplaces
7. Assessment Using Partnership Arrangements
8. Strategies for ensuring Consistency in Assessment
9. Networking for Assessors
10. Quality Assurance Guide for Assessment

An additional guide "Delivery and Assessment Strategies" has been developed to complement these resources.

**Assessment Tool Design and Conducting Assessment**


**Assessor Training**


**Assessment System Design and Management**


Competency Standards

What is competency?

The broad concept of industry competency concerns the ability to perform particular tasks and duties to the standard of performance expected in the workplace. Competency requires the application of specified skills, knowledge and attitudes relevant to effective participation in an industry, industry sector or enterprise.

Competency covers all aspects of workplace performance and involves performing individual tasks; managing a range of different tasks; responding to contingencies or breakdowns; and, dealing with the responsibilities of the workplace, including working with others. Workplace competency requires the ability to apply relevant skills, knowledge and attitudes consistently over time and in the required workplace situations and environments. In line with this concept of competency Training Packages focus on what is expected of a competent individual in the workplace as an outcome of learning, rather than focussing on the learning process itself.

Competency standards in Training Packages are determined by industry to meet identified industry skill needs. Competency standards are made up of a number of units of competency each of which describes a key function or role in a particular job function or occupation. Each unit of competency within a Training Package is linked to one or more AQF qualifications.

Contextualisation of Units of Competency by RTOs

Registered Training Organisation (RTOs) may contextualise units of competency to reflect local outcomes required. Contextualisation could involve additions or amendments to the unit of competency to suit particular delivery methods, learner profiles, specific enterprise equipment requirements, or to otherwise meet local needs. However, the integrity of the overall intended outcome of the unit of competency must be maintained.

Any contextualisation of units of competency in this endorsed Training Package must be within the bounds of the following advice. In contextualising units of competency, RTOs:

- must not remove or add to the number and content of elements and performance criteria
- may add specific industry terminology to performance criteria where this does not distort or narrow the competency outcomes
- may make amendments and additions to the range statement as long as such changes do not diminish the breadth of application of the competency and reduce its portability, and/or
- may add detail to the evidence guide in areas such as the critical aspects of evidence or resources and infrastructure required where these expand the breadth of the competency but do not limit its use.

Components of Units of Competency

The components of units of competency are summarised below, in the order in which they appear in each unit of competency.

Unit Title

The unit title is a succinct statement of the outcome of the unit of competency. Each unit of competency title is unique, both within and across Training Packages.

Unit Descriptor

The unit descriptor broadly communicates the content of the unit of competency and the skill area it addresses. Where units of competency have been contextualised from units of competency from other endorsed Training Packages, summary information is provided. There may also be a brief second paragraph that describes its relationship with other units of competency, and any licensing
requirements.

**Prerequisite Units (optional)**

If there are any units of competency that must be completed before the unit, these will be listed.

**Application of the Unit**

This sub-section fleshes out the unit of competency's scope, purpose and operation in different contexts, for example, by showing how it applies in the workplace.

**Competency Field (Optional)**

The competency field either reflects the way the units of competency are categorised in the Training Package or denotes the industry sector, specialisation or function. It is an optional component of the unit of competency.

**Sector (optional)**

The industry sector is a further categorisation of the competency field and identifies the next classification, for example an elective or supervision field.

**Elements of Competency**

The elements of competency are the basic building blocks of the unit of competency. They describe in terms of outcomes the significant functions and tasks that make up the competency.

**Performance Criteria**

The performance criteria specify the required performance in relevant tasks, roles, skills and in the applied knowledge that enables competent performance. They are usually written in passive voice. Critical terms or phrases may be written in bold italics and then defined in range statement, in the order of their appearance in the performance criteria.

**Required Skills and Knowledge**

The essential skills and knowledge are either identified separately or combined. Knowledge identifies what a person needs to know to perform the work in an informed and effective manner. Skills describe the application of knowledge to situations where understanding is converted into a workplace outcome.

**Key Competencies**

The way the Key Competencies relate to the unit will be described (unless the developer has described them at the level of the qualification). The Key Competencies are described in more detail at the end of this section.

**Range Statement**

The range statement provides a context for the unit of competency, describing essential operating conditions that may be present with training and assessment, depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts. As applicable, the meanings of key terms used in the performance criteria will also be explained in the range statement.

**Evidence Guide**

The evidence guide is critical in assessment as it provides information to the Registered Training Organisation (RTO) and assessor about how the described competency may be demonstrated. The evidence guide does this by providing a range of evidence for the assessor to make determinations, and by providing the assessment context. The evidence guide describes:
• conditions under which competency must be assessed including variables such as the assessment environment or necessary equipment
• relationships with the assessment of any other units of competency
• suitable methodologies for conducting assessment including the potential for workplace simulation
• resource implications, for example access to particular equipment, infrastructure or situations
• how consistency in performance can be assessed over time, various contexts and with a range of evidence, and
• the required underpinning knowledge and skills

Key Competencies

All Training Packages require the integration of Key Competencies either in each unit of competency, or across a qualification, depending on industry needs and preferences.

The Key Competencies were first defined in 1992 in the project report, *Putting General Education to Work: The Key Competencies Report* (Mayer Committee 1992). The skills and knowledge they describe are essential for effective workplace participation and involve the sorts of capabilities commonly used by employers as selection criteria. They underpin the ability of employees to adapt to technological, organisational, societal and functional change.

The Key Competencies are generic, in that they apply to work in general, rather than to particular occupations or industries. They focus on the application of knowledge and skills in an integrated way in workplace situations. The seven Key Competencies are:

1 Communicating ideas and information

The capacity to communicate effectively with others using the range of spoken, written, graphic and other non-verbal means of expression.

2 Collecting, analysing and organising information

The capacity to locate, sift and sort information in order to select what is required and to present it in a useful way, and evaluate both the information itself and the sources and methods used to collect it.

3 Planning and organising activities

The capacity to plan and organise one's own work activities, including making good use of time and resources, sorting out priorities and monitoring one's performance.

4 Working with others in teams

The capacity to interact effectively with other people both on a one-to-one basis and in groups, including understanding and responding to the needs of a client and working effectively as a member of a team to achieve a shared goal.

5 Using mathematical ideas and techniques

The capacity to use mathematical ideas, such as number and space, and techniques such as estimation and approximation, for practical purposes.

6 Solving problems

The capacity to apply problem-solving strategies in purposeful ways, both in situations where the problem and the solution are clearly evident and in situations requiring creative thinking and a creative approach to achieve a desired outcome.

7 Using technology

The capacity to apply technology, combining the physical and sensory skills needed to operate
equipment with the understanding of scientific and technological principles needed to explore and adapt systems.

**Performance Levels**

There are three levels of performance defined within the Key Competencies. These are stand-alone levels and do not correspond to the AQF qualification levels.

- **Performance Level 1** is concerned with the level of competence needed to *undertake* activities efficiently with sufficient self-management to meet the explicit requirements of the activity, and to make judgements about the quality of outcomes against established criteria.

- **Performance Level 2** describes the competence needed to *manage* activities requiring the selection, application and integration of a number of elements, and to select from established criteria to judge quality of process and outcome.

- **Performance Level 3** describes the competence needed to *evaluate and reshape* processes, to establish and use principles in order to determine appropriate ways of approaching activities, and to establish criteria for judging quality of process and outcome.

However, relating performance to the specific industry or workplace context may be more useful than interpreting the somewhat abstracted performance levels provided above. Where the Key Competencies are defined in the unit of competency, you will find them in a table, together with examples of their application, to help with assessment of their performance.

Also, in evaluating the level of performance for the Key Competencies, consider the performance expectations at the AQF qualification level involved.

**Delivery and Assessment of Key Competencies**

The Key Competencies are integral to workplace competency, and, as such must be explicitly considered in the design, customisation, delivery and assessment of vocational education and training programs as represented diagrammatically below.
Customisation of Conservation & Land Management Competency Standards

Customising competency standards involves adding or changing specific industry or enterprise information to the standards to better reflect the work of a particular industry or workplace.

Customisation involves no major changes to the integrity of the standards. The areas where additions or changes to information can be made are in the Performance Criteria, the Evidence Guides and/or the Range of Variables.

A customised standard describes a workplace outcome in a specific enterprise or workplace context that is an equivalent to the national standard. Customisation should not be so extensive that the assessment and training required to achieve the unit of competency is decreased or substantially increased.

There are three broad principles relating to the customisation of competency standards. Customisation must ensure the integrity of:

- industry skill requirements,
- industry portability requirements,
- national competency standards system and AQF qualifications.

Customisation can occur in a number of ways.

**Performance criteria** can have terminology changed to reflect equivalent enterprise criteria. For example, ‘... according to enterprise procedures’ could become ‘... according to XYZ Corporations workplace procedures manual’. Generic terms can be replaced with specific terms. For example, ‘plant’ could become ‘seedling’ or ‘tube stock’, ‘pest’ could become ‘weed’ or even a specific species such as ‘dingo’ or ‘rabbit’ where it is relevant to the performance of that competency. Performance criteria can also be added where additional steps may want to be emphasised by the enterprise. For example, a worker may be required to immediately contact a nominated person on detection of certain pest plants or animals and this can be added as a performance criterium into the standard.

The **Range of Variables** can similarly be added to or amended to emphasis particular enterprise contexts. Moreover, items in the Range of Variables that are not relevant to an enterprise can be deleted.

The **Evidence Guide** can also be changed to suit a specific enterprise context. For example, items under underpinning knowledge and skills can be made more specific or have terminology changed to make them more relevant. Additional knowledge and skill requirements can be added where desired.

Where a unit has been customised, it will be necessary to state equivalence to the original national competency standard and provide it with a new code. For example, ‘This unit is equivalent to the competency standard RTD4406A Implement pest management action plans’ could be added to the unit descriptor while the code could be changed to XYZRTD4406A where XYZ is a prefix representative of the enterprise.

Questions regarding equivalence with customised competency standards in conservation and land management should be referred to the Rural Training Council of Australia.

**Competency Standards & their Structure**

**What are competency standards?**

The broad concept of competency is related to realistic work practices expressed as an outcome that can be understood by all people in the workplace as well as by trainers and assessors. It is important that the meaning of competency is interpreted and understood in the same way by different users, and in different situations.

Competency comprises specified knowledge and skills relevant to an industry, and the application of that knowledge and skills to the standard of performance required in the workplace.
ANTA’s definition of competency encompasses several features:

"The concept of competency focuses on what is expected of an employee in the workplace rather than the learning process, and embodies the ability to transfer and apply skills and knowledge to new situations and environments".

An element of the Training Package is the Competency Standard, which is made up of a number of Units of Competency. Each Unit of Competency has a Title, Unit Descriptor, Elements, Performance Criteria, a Range Statement and an Evidence Guide.
Appendices

Relationship Matrix between the Conservation & Land Management Units of Competency and Industry Sectors

The following Relationship Matrix lists all units of competency within the Conservation & Land Management Training Package and identifies which particular Industry Sector Qualification they appear in.

The Matrix also identifies whether the unit is Category A / B (refer below) within a qualification.

- **Category A** - these are the key technical work functions that have been designated for each sector specialisation
- **Category B** - these are the more generic work functions across a number of industry sectors and a wide choice is available

<table>
<thead>
<tr>
<th>Nominal AQF Level 1 Units</th>
<th>GENERAL QUALIFICATION ONLY AVAILABLE</th>
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<tbody>
<tr>
<td>RTC1006A Support nursery work</td>
<td>B</td>
</tr>
<tr>
<td>RTC1201A Maintain the workplace</td>
<td>B</td>
</tr>
<tr>
<td>RTC1202A Support landscape work</td>
<td>B</td>
</tr>
<tr>
<td>RTC1301A Operate basic machinery and equipment</td>
<td>B</td>
</tr>
<tr>
<td>RTC1302A Assist with routine maintenance of machinery and equipment</td>
<td>B</td>
</tr>
<tr>
<td>RTD1501A Support natural area conservation</td>
<td>B</td>
</tr>
<tr>
<td>RTC1701A Follow basic chemical safety rules</td>
<td>B</td>
</tr>
<tr>
<td>RTC1801A Prepare for work</td>
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<tr>
<th>Nominal AQF Level 2 Units</th>
<th>GEN</th>
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<th>ILM</th>
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<th>NAR</th>
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<th>WEM</th>
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<tr>
<td>BSBCMNI205A Use business technology</td>
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<td></td>
<td></td>
<td>B</td>
<td>B</td>
<td>B</td>
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<tr>
<td>BSBCMNI206A Process and maintain workplace information</td>
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<td>FPIFGM023A Store and dispatch seed</td>
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<td>FPIFGM139A Operate 4x4 vehicle in off-road conditions</td>
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<td>B</td>
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<tr>
<td>FPIFGM162A Collect, treat and store seed</td>
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<td>FPI2191516A</td>
<td>Reduce wildfire hazards</td>
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<td>MNMOCC638A</td>
<td>Undertake direct seeding</td>
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<td>MNQ.OP/20.A</td>
<td>Conduct grader operations</td>
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<td>Conduct front end loader operations</td>
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<td>MNQ.OP/22.A</td>
<td>Conduct shovel / excavator operations</td>
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<td>Conduct haul truck operations</td>
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<td>MNQ.OP/24.A</td>
<td>Conduct dozer operations</td>
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<td>Conduct scraper operations</td>
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<tr>
<td>PUAFIR204A</td>
<td>Respond to wildfire</td>
<td>B</td>
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<td>B</td>
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<td>PUALAW001A</td>
<td>Protect and preserve incident scene</td>
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<tr>
<td>RTD2004A</td>
<td>Collect, prepare and preserve plant specimens</td>
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<tr>
<td>RTC2005A</td>
<td>Fell small trees</td>
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<tr>
<td>RTC2012A</td>
<td>Plant trees and shrubs</td>
<td>B</td>
<td>A</td>
<td>B</td>
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<tr>
<td>RTC2016A</td>
<td>Recognise plants</td>
<td>B</td>
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<td>B</td>
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<tr>
<td>RTD2022A</td>
<td>Carry out natural area restoration works</td>
<td>B</td>
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<td>RTC2026A</td>
<td>Undertake propagation activities</td>
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<td>RTD2101A</td>
<td>Apply animal trapping techniques</td>
<td>B</td>
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<td>RTD2116A</td>
<td>Muster pest animals</td>
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<td>RTD2125A</td>
<td>Use firearms to humanely destroy animals</td>
<td>B</td>
<td></td>
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<td>RTD2126A</td>
<td>Recognise animals</td>
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<td>RTD2202A</td>
<td>Conduct erosion and sediment control activities</td>
<td>B</td>
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<td>RTC2203A</td>
<td>Conduct visual</td>
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<td>Nominal AQF Level 2 Units</td>
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<td>RTD2313A Clean machinery of plant, animal and soil material</td>
<td>B</td>
<td>A</td>
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<td>RTC2401A Treat weeds</td>
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<td>B</td>
<td>A</td>
<td>A</td>
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<td>RTD2402A Clear features that harbour pest animals</td>
<td>B</td>
<td></td>
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<td>B</td>
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<td>RTD2403A Conduct vertebrate pest activities from aircraft</td>
<td>B</td>
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<tr>
<td>RTC2404A Treat plant pests, diseases and disorders</td>
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<tr>
<td>RTD2405A Tag and locate judas animals</td>
<td>B</td>
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<td>RTD2501A Maintain cultural places</td>
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<td></td>
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<tr>
<td>RTC2502A Maintain wildlife habitat refuges</td>
<td>B</td>
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<td>B</td>
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<td>RTC2701A Follow OHS procedures</td>
<td>A</td>
<td></td>
<td>A</td>
<td>A</td>
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<tr>
<td>RTC2702A Observe environmental work practices</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
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<tr>
<td>RTD2703A Operate in isolated and remote situations</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>A</td>
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<td>B</td>
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<tr>
<td>RTC2704A Provide basic first aid</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
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<td>RTC2705A Work effectively in the industry</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
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<td>RTC2706A Apply chemicals under supervision</td>
<td>B</td>
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<td>RTC2801A Participate in workplace communications</td>
<td>A</td>
<td>A</td>
<td>A</td>
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<td>RTD2802A Record information about country</td>
<td>B</td>
<td>A</td>
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<tr>
<td>RTD2803A Observe and report on plants and/or animals</td>
<td>B</td>
<td>B</td>
<td>B</td>
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<tr>
<td>SFISHIP206A Operate a small vessel</td>
<td>B</td>
<td>B</td>
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<tr>
<td>THTFAT01B Provide on-site information and assistance</td>
<td>B</td>
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<td>THTFTG01B Work as a guide</td>
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### Nominal AQF Level 3 Units

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<tr>
<th>Units</th>
<th>GEN</th>
<th>CCF</th>
<th>CEW</th>
<th>ILM</th>
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<th>NAR</th>
<th>VPM</th>
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<tbody>
<tr>
<td>BSBADM308A Process payroll</td>
<td>B</td>
<td>B</td>
<td></td>
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<tr>
<td>BSBCM206A Process and maintain workplace information</td>
<td>A</td>
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<tr>
<td>BSBCM306A Produce business documents</td>
<td>B</td>
<td>A</td>
<td>B</td>
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<td>RTD4504A Monitor biodiversity</td>
<td>RTD4505A Participate in assessments of project submissions</td>
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<tr>
<td>RTD5806A</td>
<td>Promote group formation and development</td>
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<tr>
<td>RTD5904A</td>
<td>Map relationship of business enterprise to culture and</td>
<td>B</td>
<td>A</td>
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<td>Nominal AQF Level 6 Units</td>
<td>GENERAL QUALIFICATION ONLY AVAILABLE</td>
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<tr>
<td>BSBHR604A Manage employee relations</td>
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<tr>
<td>BSBMGT603A Review and develop business plans</td>
<td>B</td>
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<tr>
<td>BSBMGT610A Manage environmental management systems</td>
<td>A</td>
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<tr>
<td>PSPPOLI601A Manage policy implementation</td>
<td>B</td>
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<tr>
<td>PUAFIR601A Develop and administer enterprise policy, procedures and practices</td>
<td>B</td>
<td></td>
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<tr>
<td>RTD6502A Review management plans and strategies</td>
<td>A</td>
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<tr>
<td>RTD6504A Coordinate the preparation of a regional resource management plan</td>
<td>A</td>
<td></td>
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<tr>
<td>RTD6505A Map regional issues and stakeholders</td>
<td>A</td>
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<tr>
<td>RTD6801A Manage cultural processes in an indigenous organisation</td>
<td>B</td>
<td></td>
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<tr>
<td>RTD6902A Monitor projects in a program</td>
<td>B</td>
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</tbody>
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**Appendices**

RTD02 Conservation And Land Management Training Package (Version 1)

To be reviewed by: 31 May 2005

Volume 1 of 2 Page 146 of 721
©Commonwealth of Australia, 2002
Date Acquired from NTIS: 29 June 2006
RTD1501A Support natural area conservation

Unit Descriptor
This competency standard covers the process of supporting conservation work under supervision in parks, natural areas, agricultural lands, or areas undergoing rehabilitation. It requires the ability to prepare materials, tools and equipment for conservation work, undertake conservation activities, store and stockpile materials, and clean up on completion of conservation work. Supporting conservation work requires knowledge of tools and equipment used in conservation work, revegetation techniques including planting, direct seeding, assisted natural regeneration, protection of remnant vegetation, maintenance tasks for conservation areas, common bushland weeds, personal protective equipment, team work, and following instructions and techniques for cleaning a site and disposing of debris.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare materials, tools and equipment for conservation work
   1.1 The required materials, tools and equipment are identified according to lists provided and/or supervisor's instructions.
   1.2 Checks are conducted on all materials, tools and equipment with insufficient or faulty items reported to the supervisor.
   1.3 Techniques used when loading and unloading materials demonstrate correct manual handling and minimise damage to the load and the vehicle.
   1.4 Suitable personal protective equipment (PPE) is selected and checked prior to use.
   1.5 Conservation support is provided according to OHS requirements and according to workplace information.
   1.6 OHS hazards are identified and reported to the supervisor.

2. Undertake conservation work as directed
   2.1 Instructions and directions provided by supervisor are followed and clarification sought when necessary.
   2.2 Conservation work is undertaken in a safe and environmentally appropriate manner according to work site guidelines.
   2.3 Interactions with other staff and clients are carried out in a positive and professional manner.
   2.4 Policy and procedures in relation to workplace handling and disposal of materials is observed.
   2.5 Problems or difficulties in completing work to required standards or timelines are reported to supervisor.

3. Store and stockpile materials
   3.1 Plant debris and waste material produced during conservation activities are stored in a designated area according to supervisor's instructions.
   3.2 Plant debris and waste materials are prepared and processed in an appropriate and safe manner according to supervisor's instructions.
   3.3 Surplus materials are stockpiled for removal according to supervisor's instructions.
   3.4 A clean and safe work site is maintained while completing conservation activities.
4. Clean up on completion of conservation work

4.1 Plants and materials are stored in a designated area according to supervisor’s instructions.

4.2 Tools and equipment are cleaned, maintained and stored according to manufacturers specifications and supervisor’s instructions.

4.3 Work outcomes are reported to the supervisor.

**KEY COMPETENCIES**

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information about the job, tasks and problems should be discussed with other members in the work team and the supervisor.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Workplace and supervisors instructions should be located, interpreted and applied with further clarification sought as necessary.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Discussions with the supervisor and other team members may be required in order to complete tasks efficiently, in a logical sequence, and in a timely manner.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Good communication and co-operation with other staff in completing conservation tasks.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Skills in counting, tallying and estimation are required when handling plants or other materials.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems will require corrective action or consultation with supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be applied in the use of tools, equipment and communication systems.</td>
<td>1</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What tasks may be included under conservation work?
- Land management fieldwork including assisting with setting out of conservation works and earthworks, site surveying, manual excavations, erection of structures, draining of dams or other holding areas, and on-site erection or dismantling of structures such as protective fences and signs.
- Revegetation activities including assisting with planting programs, direct seeding operations, assisted natural regeneration, assisting with natural regeneration, protection of remnant vegetation, removal of weeds by hand, cleaning up of on-site debris, release of animals, collecting plants or seeds for propagation.
- Maintenance of conservation areas including weed and disease control, mulching, pruning, fertilising, pruning, watering, securing plants (e.g., staking, tying), repair of installation of guards and protective fencing.

What instructions may be relevant to this standard?
Instructions may include Standard Operating Procedures (SOPs), specifications, work notes, Material Safety Data Sheets (MSDSs), manufacturers instructions, or verbal directions from manager, supervisor, or senior field operators.

What tools and equipment may be required for conservation work?
Tools and equipment may include secateurs, spades, shovels, rakes, spray equipment, and hand or mechanical augers.

What workplace information might be required for this standard?
Workplace information may include procedures for disposing of waste materials, work instructions or verbal instructions from the supervisor.

What OHS hazards may be associated with nursery support?
Hazards may include heavy materials and equipment, slippery or uneven surfaces, moving machinery and vehicles, snake, spider and insect bites, solar radiation and dust.

What are the personal protective clothing and equipment requirements associated with nursery support?
Personal protective clothing and equipment may include steel capped boots/shoes, overalls, gloves, sun hat, sunscreen lotion, safety goggles, face mask and ear protectors.

What environmental waste disposal considerations may apply to this standard?
Environmental considerations for waste disposal may include prompt removal of organic waste, neutralising pits for disposal of chemicals and cleaning products, recycling plant containers.
### What plants may be included in this competency standard?
Container grown, tube grown or bare rooted trees, shrubs and groundcovers across a range of life forms and growth habits.

### What does aftercare refer to?
Weed and disease control, mulching, fertilising, pruning, watering, protection such as staking, tying and installation of guards or protective fencing, securing a plant, pruning.

### How might instructions be given?
Through supervisor's directions, planting plans and specifications and/or landholders instructions.

### What supplies may be relevant to this competency standard?
Plants, stakes, fertiliser, tree guards and mulches.

---

#### EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in supporting conservation work requires evidence that work completed meets the needs of the supervisor and/or landholder and is undertaken according to enterprise guidelines and industry best practice. The skills and knowledge required to supporting conservation work must be transferable to a range of work environments and contexts. For example, this could include different conservation activities, supervisors, tools and equipment and locations.

### What specific knowledge is needed to achieve the performance criteria?
Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Tools and equipment used in conservation work.
- Revegetation techniques including planting, direct seeding, assisted natural regeneration and protection of remnant vegetation.
- Maintenance tasks for conservation areas.
- Common bushland weeds.
- Personal protective equipment.
- Team work and following instructions.
- Techniques for cleaning a site and disposing of debris.

### What specific skills are needed to achieve the performance criteria?
To achieve the performance criteria, some complementary skills are required. These skills are:

- Prepare materials, tools and equipment for conservation work.
- Undertake conservation work as directed.
- Store and stockpile materials.
- Clean up on completion of conservation work.
Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD2004A Collect, prepare and preserve plant specimens

Unit Descriptor
This competency standard covers the process of collecting and preserving plant specimens for recording or identification purposes. It requires the ability to collect appropriate plant specimens, prepare and preserve them and to record data. Collecting, preparing and preserving plant specimens requires knowledge of plant lifecycles, plant recognition, simple taxonomic keys, and legislative limitations on the collection of flora including threatened species.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Collect specimen
1.1 Sample collected is the largest practical to fit on herbarium sheet.
1.2 Sample includes features required for positive identification, e.g., flowers and fruit, leaves and roots.
1.3 Particular features are collected following enterprise procedures or guidelines.
1.4 Observations regarding locality, habit of plant, etc., are recorded following enterprise procedure.
1.5 Individual specimens are clearly identified in a manner that allows them to be linked to observations.

2. Press plant
2.1 Samples are protected from wilting until pressing following enterprise procedures.
2.2 Specimens are arranged on sheets following enterprise guidelines for pressing.
2.3 Specimens are pressed correctly following established guidelines.
2.4 Archival specimens are attached to suitable material with observations attached following established material.
2.5 Specimens to be submitted for identification are packed following established procedures, including all data from collection observations as required by herbarium.

3. Record data
3.1 All data relating to specimens is recorded and catalogued correctly following enterprise procedures.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Recording data on specimens.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Cataloguing and indexing specimens and observations.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Organising collection and preparation of specimens.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Carrying out specimen collection and preservation.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Cataloguing data and preserving specimens correctly.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Mounting and cataloguing specimens correctly.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Recording and collating data.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

**What types of plants may be included?**

All life forms including trees, shrubs, ground covers, herbs, epiphytes and saprophytes.

**How will preservation be carried out?**

Preservation methods will vary according to plant habit and size, as well as enterprise procedures.

**How may specimens be recorded and catalogued?**

Either by manual or electronic means.
## EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in collecting, preparing and preserving plant specimens requires evidence that plants have been appropriately collected, preserved and catalogued to enterprise standards. The skills and knowledge required to collect, prepare and preserve plant specimens must be transferable to a range of work environments and contexts. For example, this could include different plants from other areas.

### What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Recognition of plants to be collected.
- Legislative limitations on the collection of flora (including threatened species).

### What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Collect specimen.
- Press plant.
- Record and catalogue data.

### Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

### Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
**RTD2022A**

**Unit Descriptor**

This competency standard covers the process of carrying out natural area restoration work as part of a team. Natural area restoration is likely to be under routine supervision with intermittent checking. Competency is demonstrated by the application of knowledge and skills to a range of natural area restoration tasks. The work is usually within established routines, methods and procedures.

**Unit Sector**

No Sector Assigned

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**ELEMENT**

**PERFORMANCE CRITERIA**

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
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</thead>
</table>
| 1. Prepare for natural area restoration works | 1.1 **Services** are located using site and natural area restoration plans and in consultation with the supervisor  
1.2 **OHS hazards** are identified, risks assessed and reported to the supervisor  
1.3 The **environmental implications** of natural area restoration works are identified and the likely outcomes assessed and reported to the supervisor  
1.4 Natural area restoration **tools, equipment and machinery** are selected and prepared for use according to **enterprise work procedures** and native plant species to be established  
1.5 Pre-operational and safety checks are carried out on tools, equipment and machinery according to manufacturers specifications and enterprise work procedures  
1.6 Suitable **safety** and **personal protective equipment (PPE)** is selected, used and maintained |
| 2. Apply weed control measures | 2.1 Species and quantities of **weeds** requiring control are identified according to enterprise work procedures  
2.2 Herbicides are prepared, where necessary, according to manufacturers specifications and enterprise work procedures  
2.3 **Weed control measures** are undertaken according to the weed and non-target species **physiological characteristics**, and enterprise work procedures  
2.4 Work practices and control measures employed cause damage only to the target weed species |
| 3. Prepare the soil for natural area restoration | 3.1 **Soil treatments** are selected according to the **soil condition**, species requirements and enterprise work procedures  
3.2 Intact natural soil profiles are protected from damage  
3.3 Soil treatments are applied either broadly or at specific restoration sites according to enterprise work procedures |
4. Replace native vegetation on the natural area restoration site

4.1 Vegetation replacement methods are determined and assisted natural regeneration, planting, seeding or transplanting treatments are prepared according to the restoration plan and enterprise work procedures.

4.2 Assisted regeneration treatments are applied to remnant vegetation and intact soil profiles where required according to enterprise work procedures.

4.3 Seed (and fertiliser if required) is sown either by hand in discrete areas or broadly using sowing and/or ripping trailed machinery.

4.4 Containerised plants or transplants are positioned according to the restoration plan and planted firmly ensuring good contact between roots and surrounding soil according to enterprise work procedures.

4.5 Hand watering or irrigation, where specified, is undertaken to establish newly sown or planted vegetation.

4.6 The natural area restoration works are undertaken according to OHS requirements.

5. Complete natural area restoration works

5.1 Plant guards and/or fencing are installed and maintained according to the natural area restoration plan and enterprise work procedures.

5.2 Multiple follow up weed control treatments are undertaken, as necessary, according to enterprise work procedures.

5.3 Waste material is removed from the natural area restoration site and disposed of in an environmentally aware and safe manner according to enterprise work procedures.

5.4 Tools, equipment and machinery are cleaned, maintained and stored according to enterprise work procedures.

5.5 A clean and safe area is maintained throughout and upon completion of work according to enterprise work procedures.

5.6 Work outcomes are recorded or reported to the supervisor according to enterprise work procedures.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<th>Example of Application</th>
<th>Performance Level</th>
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</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information relating to natural area restoration activities and problems encountered should be discussed with other members of the work team and the supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>The site and surrounding area should be inspected visually and the information gained discussed with the work team and supervisor. Enterprise work procedures and site and natural area restoration plans should be consulted, interpreted and applied to coordinate natural area restoration activities with further clarification sought from the supervisor where necessary.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Equipment, materials and work procedures for natural area restoration activities will need to be arranged before and between work periods and there will be some responsibility for coordinating work with others.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>The natural area restoration program will involve working with other members of a team to complete the program.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Applying site plan layout to the physical site, measuring distance, calculating areas, calibrating equipment and machinery, estimating quantities of materials, measuring treatment volumes and rates, and calculating planting and seeding rates will require mathematical application.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems relating to natural area restoration techniques, processes, the work site, workplace safety and other team members may arise during natural area restoration activities.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be applied in the preparation, use and maintenance of natural area restoration tools, equipment and machinery.</td>
<td>1</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available.

**What natural area restoration techniques are included in this competency standard?**

Natural area restoration works may cover clearing of vegetation, soil stabilisation, weed suppression and control, planting of terrestrial and aquatic plant species as containerised or bare rooted plants, direct seeding of native species by hand or machine, protection and maintenance of remnant vegetation, encouragement of natural regeneration, weed and animal control, removal of debris, watering, mulching and construction of protective fencing and other plant guards.

**What services may need to be located?**

Services may include water supply, gas, power (electricity), telecommunications, irrigation, stormwater and drainage.

**How may OHS hazards be identified?**

Hazards may be identified through visual inspection of the area, understanding of site and restoration plans, and enterprise work procedures.

**What OHS hazards may be associated with natural area restoration works?**

Hazards may include disturbance or interruption of services, solar radiation, dust, noise, air- and soil-borne micro-organisms, chemicals and hazardous substances, sharp hand tools and equipment, manual handling, moving machinery and machinery parts, slippery and uneven surfaces, dehydration, stings.

**What are the environmental implications when undertaking natural area restoration works?**

Environmental implications associated with the natural area restoration program will be generally beneficial to the external environment when the revegetation is consistent with the needs of the flora and fauna indigenous to the site and geographic region. However, work activities undertaken may have immediate detrimental effects on the surrounding environment, including levels of noise, dust, high activity vehicle traffic and inappropriate waste disposal.

**What tools, equipment and machinery may be required to carry out natural area restoration works?**

Tools, equipment and machinery may include knives, trowels, spades, forks, rakes, hoes, shovels, buckets, brooms, wheelbarrows, hoses and hose fittings, tree-planters, secateurs or snips; ancillary equipment such as stabilising materials, weed mats, stakes, tree guards, fencing materials; and machinery such as tractors and 3-point linkage or trailed equipment, pesticide and fertiliser application machinery or backpacks.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What enterprise work procedures may apply to this standard?</td>
<td>Work procedures will be based on sound horticultural principles and practices and may include supervisors oral or written instructions, the natural area restoration plan (including species lists), enterprise standard operating procedures (SOP), specifications, routine maintenance schedules, work notes; product labels and Material Safety Data Sheets (MSDS); manufacturers service specifications and operators manuals; waste disposal, recycling and re-use guidelines; and OHS procedures.</td>
</tr>
<tr>
<td>What plant species may be used in the natural area restoration program?</td>
<td>Plant species may be local provenance natives or non-native cover plants in accordance with the planting schedule and local management plans.</td>
</tr>
<tr>
<td>What safety equipment may be required?</td>
<td>Safety equipment may include signage and barriers.</td>
</tr>
<tr>
<td>What personal protective equipment (PPE) may be required to undertake natural area restoration works?</td>
<td>Personal protective equipment may include hat, boots, overalls, gloves, goggles, respirator or face mask, face guard, hearing protection, drinking water, sunscreen lotion and hard hat.</td>
</tr>
<tr>
<td>What weeds may be targeted for control in the natural area restoration area?</td>
<td>Weeds may include exotic plants or native species from other regions, which impact on the establishment, health or growth rate of the natural area restoration species and the aesthetic quality of the site.</td>
</tr>
<tr>
<td>What weed control measures may be appropriate to this standard?</td>
<td>Weed control measures may include the application of non-residual, non-specific herbicide to weeds by spray, wick, cut and paint, injection, or hand removal of seedlings, whole plants or seed heads.</td>
</tr>
<tr>
<td>What physiological characteristics of weeds may affect the herbicide application method?</td>
<td>Characteristics may include seasonal aspects, stage of growth, metabolic processes, and presence of wood on the stem.</td>
</tr>
<tr>
<td>What soil treatments may be appropriate for this standard?</td>
<td>Soil treatments may include stabilising materials, dead vegetative material, mulch and weed mats or conditioning additives to effect a change in the water holding capacity of the soil, pH, organic components, soil structure and texture.</td>
</tr>
<tr>
<td>What soil conditions may require treatment?</td>
<td>The area to be revegetated may suffer from a variety of problems including vulnerability to or exacerbated water or wind erosion, non-wetting soils, low or high pH, salinity and waterlogging.</td>
</tr>
<tr>
<td>What types of irrigation system may be relevant to this standard?</td>
<td>Irrigation systems include sprinklers, sprayers and drippers.</td>
</tr>
<tr>
<td></td>
<td>Irrigation system components may include pumps, lines, pipes, sprinklers, sprinkler heads, solenoids, filters, controllers, sprayers and drippers.</td>
</tr>
<tr>
<td><strong>What vegetation replacement methods may be used when undertaking natural area restoration works?</strong></td>
<td>Vegetation replacement methods may include hand sowing, direct seeding, tube planting, hand or machine assisted planting of seedlings, planting of divisions, transplanting, assisted regeneration and natural regeneration.</td>
</tr>
<tr>
<td><strong>What OHS requirements may be relevant to this standard?</strong></td>
<td>OHS requirements may include identifying hazards; assessing and reporting risks; cleaning, maintaining and storing tools, equipment and machinery; appropriate use of personal protective equipment including sun protection, drinking water to avoid dehydration, posture correction, eye protection, safe operation of tools, equipment and machinery; safe handling, use and storage of chemicals and hazardous substances; correct manual handling; basic first aid; personal hygiene and reporting problems to supervisors.</td>
</tr>
<tr>
<td><strong>What waste material may be relevant to this standard?</strong></td>
<td>Waste material may include unused work material such as pesticides, plant debris, litter and broken components. Plant-based material may be mulched or composted, plastic, metal, paper-based materials may be recycled, re-used, returned to the manufacturer or disposed of according to enterprise work procedures.</td>
</tr>
<tr>
<td><strong>What tasks may be undertaken to maintain a clean and safe area?</strong></td>
<td>Tasks may include keeping public access paths clear of debris, waste material, tools, equipment and machinery; disabling equipment and machinery after use; using signage and safety barriers during and removing after natural area restoration activities are completed, and removing debris and waste from the work area swiftly and efficiently.</td>
</tr>
</tbody>
</table>
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in carrying out natural area restoration works requires evidence that a person using natural area restoration tools, equipment and machinery can effectively assist other workers in controlling weeds, preparing soils, sowing and planting, installing ancillary equipment and cleaning up the natural area restoration site.

The skills and knowledge required to carry out natural area restoration works must be transferable to a different work environment. For example, this could include different environments, plant species and techniques of natural area restoration.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Common and scientific names of native plants.
- Common names of native animals.
- Common names of weeds and pest animals.
- The importance and value of the local provenance species.
- Natural area restoration techniques.
- Basic plant and animal ecology
- Map and plan reading.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Participate in teams and contribute to team objectives.
- Read written instructions, understand and interpret work procedures.
- Communicate with team members and supervisor effectively.
- Calibrate tools, equipment and machinery, measure distance, calculate area, planting and seeding rates, volumes and treatment application rates.
- Minimise noise, dust, high activity vehicle traffic and water run-off to prevent nuisance-level environmental disturbance.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTD2101A Apply animal trapping techniques

Unit Descriptor
This competency standard covers the process of live trapping and holding, releasing or humanely destroying animals. It requires the ability to prepare baits or lures, lay trails, handle and set traps, handle, transport, release and/or destroy animals. Applying trapping techniques requires knowledge of relevant legislation, animal life cycles and behaviours, trapping and catching equipment and operations, basic animal handling and care, legislation applying to the capture and care of animals, and transportation methods of caught animals.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Plan animal capture
   1.1 Purpose of capture of animals is identified as determined from the management strategy and action plans.
   1.2 Target animal range and behaviour are confirmed.
   1.3 Trapping location and placement of equipment are determined.
   1.4 Time required to complete capture is estimated and trapping effort is determined.
   1.5 Materials and equipment for trapping are identified.
   1.6 Hazards associated with trapping are identified in accordance with OHS practices and procedures.
   1.7 Environmental risks associated with capturing animals are identified in accordance with statutory and local authority requirements.

2. Prepare for trapping
   2.1 Locations for the trapping activity are mapped to be consistent with target animal behaviour and in accordance with the management strategy and relevant monitoring programs.
   2.2 Relevant licenses and permission to enter property are obtained.
   2.3 Precautions to minimise hazards are identified in accordance with OHS practices and procedures.
   2.4 Precautions to minimise environmental risks associated with capturing the target animal are identified.
   2.5 Precautions to minimise trapping of non-target animals are considered.
   2.6 Vehicles, equipment and materials are checked for serviceability in accordance with manufacturer's specifications and relevant policies.
3. Place and set traps

3.1 Site for trapping is selected to maximise chance of trapping target animals and minimise chance of trapping non-target animals.

3.2 Site for capturing animals is prepared in accordance with industry practice.

3.3 Trapping equipment is constructed, positioned and secured in accordance with industry practice.

3.4 Trapping equipment is set safely in accordance with manufacturer's instructions.

3.5 Trapping equipment is checked for strength and security in accordance with industry practice.

3.6 Trap mechanisms are set or calibrated in accordance with manufacturer's instructions.

3.7 Lures or baits are applied in accordance with industry practice if required.

3.8 Traps are camouflaged as required.

3.9 Precautions to prevent trapping of non-target animals are applied in accordance with industry practice.

4. Check and remove traps

4.1 Traps are checked regularly in accordance with industry practice.

4.2 Trapped animals are identified then released, killed or prepared for transport in accordance with industry practice.

4.3 Captured animals are handled humanely according to enterprise requirements and animal welfare guidelines.

4.4 Animals are checked according to supervisor instructions and enterprise guidelines.

4.5 Animals are transported from site where required in a safe and appropriate manner according to legislative and enterprise requirements.

4.6 Occupational health and safety and public safety requirements are met prior to and during trapping activities.

4.7 Trap mechanism is released safely and trap is removed in accordance with industry practice.

4.8 Trap site is restored to prior condition.

5. Report completion of work

5.1 Results of trapping activities are reported according to enterprise guidelines.

5.2 Incidents with animals are dealt with and reported according to legislative, enterprise, occupational health and safety and public safety requirements.

6. Clean and store equipment and materials

6.1 Carcasses for research or other purposes are cleaned and stored in accordance with relevant policies and procedures and industry practice.

6.2 Equipment and materials are cleaned and stored in accordance with relevant standards and policies.

6.3 Target and non-target kills are recorded in accordance with statutory requirements and enterprise guidelines.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Clarify requirements and expectations for the job, liaise with work colleagues during work activities, and document work activities in writing.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Determine appropriate bait and trap type.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Organise own work activities.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Collaborate with work colleagues during work activities.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Determining number of traps required and their distribution, recording counts of animals caught.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Consider problems that arise during the job and determine contingency activities.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Use and maintain traps and firearms.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which purposes for capture may be included?

Scientific research, removal of animals from unsuitable locations or to another habitat, protection of humans from attack, disturbance or disease, collection of animals to establish breeding populations and vertebrate pest control, fauna survey.

Which locations may be relevant to this standard?

Urban, including roadways, railways, open space, inside buildings, rural, including roadways, farmland, inside buildings, parks/reserves including steep and rugged lands and in dense growth, and off park areas.

Which licenses may be included?

Firearms, wildlife capture, keeping of wildlife, occupational health and safety certification, scientific and Animal Care and Ethics Committee or equivalent, small boat handling.
What types of equipment may be relevant? | Vehicles, vessels, elevating work platforms, cages, sacks and traps, bait, firearms and ammunition, ladders, identification tags, ropes and related equipment, personal protective equipment, first aid kit, scientific research equipment and instruments, cameras, 2 way radios and mobile telephones, equipment for safe transport and care of species, appropriate food for species, maps and identification keys.

What sorts of incidents may be considered? | Animals attacking people, animals on roadways and railways, bites, cuts, scratches, falls, injured animals, damage to vehicles, escapes from traps and cages, and animals loose in or under vehicles.

What are the relevant Federal, State legislation and local regulations that may be included? | Environmental protection, vertebrate pests, use of firearms (including licensing requirements and exemptions), humane treatment of animals, activities in nature reserves and heritage areas, poisons and veterinary substances, identification and reporting of suspected outbreaks of exotic disease, OHS regulations, and common law principles relating to property, stock, duty of care and due diligence.

Which animals may be included in this standard? | Native animals, domestic species and species determined to be pests of primary production, the environment or public health and lifestyle. This standard covers small, medium and large animals.

What might be included as resources? | Human, financial, land, air, water transport facilities, physical (traps, firearms, ammunition, veterinary products), plant (excavators, front-end loaders) and fencing materials.

How should killed animal carcasses be dealt with? | Animal carcases with commercial or scientific value should be stored in accordance with the enterprise guidelines. Other animal carcases should be disposed of as required in accordance with statutory requirements and industry practice.

Which types of traps may be included? | A range of trap construction designs, spring loaded rubber-jawed traps, barrel netting or mesh traps, lures, cage traps, cannon netting and mist nets, pitfall traps.
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in apply animal trapping techniques requires evidence that animals have been humanely trapped and released or destroyed according to enterprise guidelines and industry best practice. The skills and knowledge required to apply trapping techniques must be transferable to a range of work environments and contexts. For example, this could include different trapping techniques, animal species or locations.

<table>
<thead>
<tr>
<th>What specific knowledge is needed to achieve the performance criteria?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:</td>
</tr>
<tr>
<td>• Relevant legislation.</td>
</tr>
<tr>
<td>• Common law principles relating to property, stock, duty of care and due diligence.</td>
</tr>
<tr>
<td>• Animal life cycles and behaviours.</td>
</tr>
<tr>
<td>• Catching techniques, equipment and operation.</td>
</tr>
<tr>
<td>• Suitable traps for the given animal species.</td>
</tr>
<tr>
<td>• Animal welfare.</td>
</tr>
<tr>
<td>• Animal identification.</td>
</tr>
<tr>
<td>• Basic animal handling and care.</td>
</tr>
<tr>
<td>• Legislation applying to the capture and care of wildlife.</td>
</tr>
<tr>
<td>• Transportation methods of caught animals.</td>
</tr>
<tr>
<td>• Occupational health and safety and public welfare legislation, regulations, Codes of Practice and enterprise procedures.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What specific skills are needed to achieve the performance criteria?</th>
</tr>
</thead>
<tbody>
<tr>
<td>To achieve the performance criteria, some complementary skills are required. These skills include the ability to:</td>
</tr>
<tr>
<td>• Plan animal capture.</td>
</tr>
<tr>
<td>• Prepare for trapping.</td>
</tr>
<tr>
<td>• Place and set traps.</td>
</tr>
<tr>
<td>• Check and remove traps.</td>
</tr>
<tr>
<td>• Report completion of work.</td>
</tr>
<tr>
<td>• Clean and store equipment and materials.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Are there other competency standards that could be assessed with this one?</th>
</tr>
</thead>
<tbody>
<tr>
<td>This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Essential Assessment Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>For information about <strong>assessing this competency standard for consistent performance</strong> and <strong>where and how it may be assessed</strong>, refer to the Assessment Guidelines for this Training Package.</td>
</tr>
</tbody>
</table>
RTD2116A Muster pest animals

Unit Descriptor

This competency standard covers the process of mustering pest animals. It requires the ability to assess the scope of the mustering job, prepare for mustering, conduct mustering operations, and clean and store equipment and materials. Mustering pest animals requires knowledge of relevant legislation, pest animal life cycles and behaviours, animal welfare, and emergency procedures related to work in isolated and remote areas.

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Assess the scope of the mustering job
   1.1 Target pest animal range and behaviour are confirmed.
   1.2 Location for the muster is determined.
   1.3 Time required to complete the muster is estimated.
   1.4 Hazards associated with the muster are identified in accordance with OHS standards.
   1.5 Environmental risks associated with the mustering job are identified in accordance with statutory and local authority requirements.
   1.6 Resources required to complete the muster are identified.

2. Prepare for mustering
   2.1 Location and boundaries for the muster are mapped to be consistent with the target pest animal behaviour and in accordance with the pest animal management strategy and monitoring program.
   2.2 Time and duration of the muster are checked and relevant personnel notified.
   2.3 Precautions to minimise hazards associated with muster are identified in accordance with OHS standards.
   2.4 Precautions to minimise environmental risks associated with the muster job are identified in accordance with statutory and local authority requirements.
   2.5 Vehicles, equipment and materials are checked for serviceability in accordance with manufacturer's specifications and relevant policies.
   2.6 Central point of muster is established and agreed with all participants.
   2.7 Holding yards are set up.
   2.8 Horses and dogs, where used in the muster, are checked for fitness.

3. Muster pest animals
   3.1 Muster is conducted at the appropriate time of day.
   3.2 Actions are taken to minimise stress to animals during the muster.
   3.3 Water and feed are provided to mustered animals and horses and dogs where they have been used in the muster.
   3.4 Animals are treated in accordance with the Code of Practice for Care, Handling and Capture of Feral Animals.
   3.5 Mustered animals are held, transported or destroyed according to enterprise guidelines.
4. Clean and store equipment and materials

4.1 Animals used during the muster are cared for in accordance with industry practice.
4.2 Equipment and materials are cleaned and stored in accordance with relevant standards and policies.
4.3 Job completion is reported or recorded in accordance with relevant policies and procedures.

KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Clarify requirements and expectations for the job, liaise with work colleagues during work activities, and document work activities in writing.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Assess signs and locate animals.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Organise own work activities.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Collaborate with work colleagues during work activities.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Calculate animal numbers, times and distances.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Consider problems that arise during the job and determine contingency activities.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Use and maintain materials and equipment.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What are the relevant Federal, State legislation and local regulations that may be included?

Environmental protection, pest animals, use of firearms (including licensing requirements and exemptions), humane treatment of animals, activities in nature reserves and heritage areas, poisons and veterinary substances, identification and reporting of suspected outbreaks of exotic disease, OHS regulations, and common law principles relating to property, stock, duty of care and due diligence.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which pest animals may be included in this standard?</td>
<td>Kangaroo, goat, horse, deer, camel, cattle, water buffalo and donkey.</td>
</tr>
<tr>
<td>What might be included as resources?</td>
<td>Human, financial and physical (traps, firearms, ammunition, poisons, fencing materials and veterinary products), and land, air and water transport facilities.</td>
</tr>
<tr>
<td>What vehicles may be included in this standard?</td>
<td>Motor vehicles, aircraft and boats.</td>
</tr>
<tr>
<td>What documentation may be included?</td>
<td>All relevant documents.</td>
</tr>
</tbody>
</table>

**EVIDENCE GUIDE**

What evidence is required to demonstrate competence for this standard as a whole?

Competence in mustering pest animals requires evidence that mustering has been successfully carried out according to enterprise guidelines and industry best practice. The skills and knowledge required to muster pest animals must be transferable to a range of work environments and contexts. For example, this could include different pest animals, vehicles, situations and environments.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Relevant legislation.
- OHS regulations.
- Common law principles relating to property, stock, duty of care and due diligence.
- Risks to land users' posed by pest animals including exotic diseases and zoonoses.
- Pest animal life cycles and behaviours.
- Animal welfare.
- Emergency procedures related to work in isolated and remote areas.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Assess the scope of the mustering job.
- Prepare for mustering.
- Conduct mustering operations.
- Clean and store equipment and materials.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.
Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD2125A Use firearms to humanely destroy animals

Unit Descriptor
This competency standard covers the process of destroying animals humanely by shooting. It requires the ability to assess and prepare for the shoot, prepare firearms, shoot animals efficiently, and clean and maintain firearms. Shooting animals requires a knowledge of relevant legislation, animal life cycles and behaviours, anatomy and physical features of the animal, firearms safety, suitable firearms and ammunition for given pest problem, animal welfare, and emergency procedures appropriate to the firearms handling.

Note: Appropriate firearms licences are required for those involved in training and assessment against this unit of competency.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Assess the scope of the shooting job
   1.1 Anatomy and physical features identifying location of vulnerable organs of target animal are confirmed.
   1.2 Location of habitats, habits and range of movement of target animal is confirmed.
   1.3 Timing of the shoot is determined based on the activity patterns of the target animal.
   1.4 Time required to complete the shoot is estimated.
   1.5 Hazards associated with the shoot are identified in accordance with OHS standards.
   1.6 Environmental and public safety risks associated with the shoot are identified in accordance with statutory and local authority requirements.
   1.7 Vehicles, equipment and materials required to complete the shoot are prepared.

2. Prepare for the shooting job
   2.1 Location and boundaries for the shoot are mapped in accordance with the animal management strategy and monitoring program.
   2.2 Time and duration of the shoot are checked and relevant personnel notified.
   2.3 Precautions to minimise hazards associated with the shoot are taken in accordance with OHS standards.
   2.4 Precautions to minimise environmental risks associated with the shoot are taken in accordance with statutory and local authority requirements.
   2.5 Vehicles, equipment and materials are checked for serviceability in accordance with manufacturer's specifications and relevant policies.
   2.6 Firearm licences or exemptions are obtained or checked in accordance with statutory requirements.
   2.7 Firearm and ammunition types are selected to comply with those recommended for the target animal in accordance with industry practice and animal ethics guidelines.
   2.8 Firearm and ammunition are checked and prepared in accordance with statutory requirements and industry practice.
   2.9 Firearm is zeroed and test fired in accordance with industry practice.
   2.10 Firearm is stowed for transport unloaded and in safety mode.
3. Shoot animals

3.1 Personal protective and safety equipment is used in accordance with OHS standards and statutory requirements.

3.2 Firearm is carried safely with muzzle pointing in safe direction at all times in accordance with statutory requirements and industry practice.

3.3 Firearm is loaded, discharged and unloaded safely in accordance with statutory requirements and industry practice.

3.4 Firearm is aimed at vulnerable sites, head or heart, on the animal.

3.5 Each target animal is killed using a minimum of shots.

3.6 Each target animal is checked to ensure it is dead prior to selecting the next target animal where possible.

3.7 Target animals that have not been killed cleanly are destroyed in a humane manner in accordance with animal welfare regulations and statutory requirements.

3.8 Carcases that are required for research or commercial use are handled as required in accordance with the animal management strategy and action plan.

3.9 Animal carcases that are not required for research or other purposes are disposed of as required in accordance with statutory requirements and industry practice.

4. Clean and store equipment and materials

4.1 Carcases for research or commercial use are cleaned and stored in accordance with relevant policies and procedures and industry practice.

4.2 Equipment and materials are cleaned and stored in accordance with relevant standards and policies.

4.3 Firearms are cleaned, maintained and stored in accordance with manufacturer's instructions and statutory requirements.

4.4 Ammunition is stored in accordance with statutory requirements.

4.5 Job completion is reported or recorded in accordance with relevant policies and procedures.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Clarify requirements and expectations for the job and liaise with work colleagues.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Determine requirements for type of firearm/ammunition.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Organise own work activities.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Collaborate with work colleagues during work activities.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Estimate ammunition requirements and assess range/trajectory.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Consider problems that arise during the job and determine contingency activities.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Use and maintain firearms.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this unit of competency. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What are the relevant Federal, State legislation and local regulations that may be included?

- Environmental protection, pest animals, use of firearms (including licensing requirements and exemptions), humane treatment of animals, activities in nature reserves and heritage areas, poisons and veterinary substances, identification and reporting of suspected outbreaks of exotic disease, OHS regulations, and common law principles relating to property, stock, duty of care and due diligence.

Which animals may be included in this standard?

- Species determined to be pests of primary production, the environment or public health and lifestyle, and those requiring destruction for humane reasons.

What might be included as resources?

- Human, financial, physical (traps, firearms, ammunition, poisons, fencing materials, veterinary products), land, air and water transport facilities and plant (excavators, front-end loaders).
**What training may be required for this standard?**

All mandatory training in firearm use and maintenance.

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**EVIDENCE GUIDE**

What evidence is required to demonstrate competence for this standard as a whole?

Competence in shooting animals requires evidence that animals are destroyed by firearms according to enterprise guidelines and industry best practice. The skills and knowledge required to shoot animals must be transferable to a range of work environments and contexts. For example, this could include different animals, firearms and environments.

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**What specific knowledge is needed to achieve the performance criteria?**

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Relevant legislation.
- OHS regulations.
- Common law principles relating to property, stock, duty of care and due diligence.
- Risks to land users posed by animals including exotic diseases.
- Animal life cycles and behaviours.
- Anatomy and physical features of the animal.
- Firearms safety.
- Suitable firearms and ammunition for given pest problem.
- Animal welfare.
- Emergency procedures appropriate to the firearms handling.

---

**What specific skills are needed to achieve the performance criteria?**

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Plan own work activities.
- Manage own time.
- Shooting accuracy.
- Use and maintenance of firearms.

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**Are there other competency standards that could be assessed with this one?**

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

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**Essential Assessment Information**

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD2126A Recognise animals

Unit Descriptor

This competency standard covers the process of recognising animals that are commonly encountered when undertaking agricultural, horticultural and land management activities. Recognising animals is likely to be under routine supervision with intermittent checking by supervisors, and requires a knowledge of animal identification techniques and nomenclature, enterprise procedures for obtaining and supplying advice and information about animals, and enterprise expectations about the range and number of animals to be recognised.

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare for animal recognition

1.1 Range of animals requiring recognition is identified according to supervisors/customers needs.

1.2 Resources and equipment for use in recognition activity are located and identified.

1.3 Available processes for animal recognition are identified, selected and prepared for use.

2. Recognise specified animals

2.1 Specified animals are recognised and named according to their identifiable characteristics.

2.2 Brief descriptions of animal habits, characteristics and significant features are recorded.

2.3 The advice of supervisors is sought when necessary and where appropriate in the identification activity.

3. Complete identification of animals

3.1 Information about identified animals is documented according to enterprise requirements and added to the reference collection.

3.2 Field notes are updated as new animals are recognised.

3.3 Rare, uncommon or notifiable pest animals are recognised.

3.4 Handling, transporting and housing of animals comply with animal ethics guidelines, animal welfare regulations and statutory requirements.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information relating to animal recognition should be discussed with other members of the work team and the supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information on specific animals should be discussed with the work team and supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Equipment, materials and work procedures for animal recognition will need to be planned in advance of activities commencing.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Animal recognition activities may involve working with other members of a team, or work alone with advice and help sought where necessary.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Counting and estimating numbers of animals will require mathematical application.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems relating to the difficulty of identifying certain features of an animal or using a taxonomic key may arise.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be applied in the identification and electronic recording of animals, research procedures, and telecommunication used for the provision of information about animals to clients and customers.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available.

What range of animals may be relevant to this standard?

Animals may be native or introduced species and can include mammals, birds, reptiles, amphibians, fish, arthropods and microfauna. Animals will comprise those commonly encountered within the industry workplace.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>How will animals be named?</td>
<td>Common names will be used in recognition of animals. However, in some situations scientific names may be required. In Indigenous communities, language names can be used in lieu of common names.</td>
</tr>
<tr>
<td>What resources may be used to recognise animals?</td>
<td>Resources may include field guides, enterprise or public library, business and research organisation websites, suppliers and contractors, enterprise supervisor and team colleague experience, and experts in the local area or industry sector. It may also include personal or enterprise reference collection.</td>
</tr>
<tr>
<td>What equipment may be used to recognise animals?</td>
<td>Equipment may include cameras, video recorders, binoculars, field guides, protective gloves and clothing, boats, wetsuits and skin-diving gear, and animal trapping and catching paraphernalia.</td>
</tr>
<tr>
<td>What processes may be available for aid in the recognition of animals?</td>
<td>Processes may include literature searches, internet browsing, personal consultation with experts, specimen collections, field guides, workplace notes, and use of simple keys.</td>
</tr>
<tr>
<td>What identifiable animal characteristics may be useful when identifying animals?</td>
<td>Animal characteristics may include the shape, size colour, texture, hair, movement, habitat and behaviour.</td>
</tr>
<tr>
<td>What documentation is involved in identifying animals?</td>
<td>Documentation may include a written description of the animal species including common and scientific names, visible characteristics, details of occurrence, photographs and reports according to the requirements of the enterprise or industry sector.</td>
</tr>
</tbody>
</table>
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in recognising animals requires evidence that a person can identify and utilise available resources and equipment to identify animals accurately. The skills and knowledge required to recognise animals must be transferable to a different work environment. For example, this could include different animals, workplace settings and environments.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Animal identification techniques and nomenclature.
- Animal behaviour.
- Animal habitats.
- Animal tracks and traces.
- Techniques for observing, collecting/catching and reporting animals.
- Enterprise procedures for obtaining and supplying advice and information about animals.
- Enterprise expectations about the range and number of animals to be recognised.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Recognise animals specific to the enterprise and describe their features and main occurrence within the enterprise.
- Use simple keys.
- Communicate with customers and clients, interpret questions effectively, and provide limited advice and information about the animals specific to the enterprise.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTD2202A Conduct erosion and sediment control activities

Unit Descriptor
This competency standard covers the process of carrying out erosion and sediment control activities in both urban and rural environments. It requires the ability to identify erosion and sediment control structures, carry out routine work in compliance with control measures, undertake work in accordance to legislation and community expectation and project specifications. Conducting erosion and sediment control activities requires knowledge of basic issues related to erosion and sedimentation, role of vegetation, characteristics of soils with an emphasis on erosion prone soils, relevant legislation and local environmental parameters.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Align work site practices with erosion and sediment control principles
   1.1 Erosion and sedimentation legislation is adhered to at the work site as a part of contract works.
   1.2 Procedures relating to erosion and sediment control are applied on the work site align with industry standards.

2. Implement erosion and sediment control principles in the workplace
   2.1 Breaches of erosion and sediment control legislation are noted and reported.
   2.2 Industry practices for erosion and sediment control is applied in the work place.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<td>Communicating ideas and information</td>
<td>By discussing verbally erosion and sediment control activities on development sites with supervisors.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Conducting erosion and sediment control activities on development sites will require basic planning and construction information to be gathered and organised accordingly.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Conducting erosion and sediment control activities on development sites requires some planning and organising of construction resources.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Conducting erosion and sediment control activities on development sites will require coordination of self and others in a team.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Basic mathematical techniques relating to measurement and timing could be applied.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>While conducting erosion and sediment control activities on development sites, technical and organisational problems may arise requiring innovative solutions.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Construction technology will be required.</td>
<td>1</td>
</tr>
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RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What are erosion and sediment control activities?

Land shaping including batter stabilisation, banks, channels, and sediment basins, traps, filters and fences. Also includes revegetation.

What are erosion and sediment control structures?

Grade stabilising structures, outlet protection structures, stormwater detention measures, dust control, and rural roads and tracks.
### What industry people may be included?

Earthmoving machine operators, cartage contractors, timber harvest machine operators, product suppliers, labourers, trade personnel, fuel suppliers, engineers, landholders, landcare groups, fitters, contractor support staff, project supervisors, forest and plantation workers, supervisors, surveyors and foresters.

### EVIDENCE GUIDE

**What evidence is required to demonstrate competence for this standard as a whole?**

Competence in conducting erosion and sediment control activities on development sites requires evidence that erosion and sediment control work has been properly completed according to community and agency guidelines and best practice procedures. The skills and knowledge required to conduct erosion and sediment control activities on development sites must be transferable to a range of work environments and contexts. For example, this could include different forms of erosion and sediment control, locations and soil types.

**What specific knowledge is needed to achieve the performance criteria?**

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Relevant legislation.
- Cost to the community of erosion and sedimentation.
- Loss of habitat.
- Water quality.
- Loss of production/asset/amenity.
- Re-occurring maintenance/repair/monitoring.
- Agents/processes of erosion and sedimentation.
- Basic catchments issues.
- Role of vegetation.
- Characteristics of soils with an emphasis on erodible soils.

**What specific skills are needed to achieve the performance criteria?**

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Identify erosion and sediment control structures/measures/practices.
- Carry out routine work with control measures and structures.
- Undertake activities in accordance with legislation/community expectation and project specifications.

**Are there other competency standards that could be assessed with this one?**

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

**Essential Assessment Information**

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD2206A Install aggregate paths

Unit Descriptor

This competency standard covers the process of installing aggregates paths. It requires the ability to plan and prepare for installation, set out the site for path construction, undertake ground preparation, lay surface aggregate materials and make good the site. Installing aggregates paths requires knowledge of OHS responsibilities, setting out, reading of plans, use of different aggregate materials, tools and equipment used in installation of paths and methods of disposing of soil and waste materials in order to minimise damage to the environment.

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Plan and prepare for installation
   1.1 Required workplace information is interpreted and confirmed with supervisor.
   1.2 Tools and equipment are prepared and used according to supervisors' instructions.
   1.3 The quantity and quality of materials are checked to ensure they conform to the requirements of the job.
   1.4 OHS hazards are identified, risks assessed and reported to the supervisor.
   1.5 Personal protective clothing and equipment is selected, used and maintained.
   1.6 Plans for public risk protection are developed in liaison with the supervisor according to statutory obligations and enterprise guidelines.
   1.7 The potential for environmental damage are assessed and measures are planned to avoid or control/minimise those impacts.

2. Set out the site for path construction
   2.1 The location of the proposed path is marked out according to the site plan and contract documents or supervisors instructions.
   2.2 The marked out area is checked with the supervisor for compliance with the site plan, contract documents and OHS requirements.
   2.3 Public risk protection measures are put in place and used throughout the course of construction work.

3. Undertake ground preparation
   3.1 The area is cleared of debris and excavated to base level and soil and waste materials are relocated or disposed of as directed.
   3.2 Measures to avoid environmental impacts are put in place prior to commencement of work.
   3.3 Base material is placed and compacted to the required finished level.
   3.4 Work carried out conforms to site plan, contract documents and instructions.
   3.5 Set out work is checked at regular intervals with supervisor.
   3.6 Edge restraints, where required, are installed according to site plan and instructions.
   3.7 Install drainage structures as directed.
   3.8 Site problems and discrepancies are reported to the supervisor.
4. Lay surface aggregate materials
   4.1 Surface aggregate materials are spread over the area to the designated depth.
   4.2 Material is screed to ensure consistent depth of materials.
   4.3 Aggregate materials are levelled to the designated level and falls.
   4.4 Aggregate materials are compacted using appropriate machinery.

5. Make good the site
   5.1 Soil and waste material from the site is disposed of or recycled to ensure minimal impact on the environment.
   5.2 Areas disturbed by installation works are reinstated according to good environmental practices.
   5.3 All tools & equipment are cleaned and stored according to supervisors' instructions.

**KEY COMPETENCIES**

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tbody>
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<td>Communicating ideas and information</td>
<td>Through the use of site plans and instructions.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Instructions for the work should be interpreted and clarification sought as necessary.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>The work tasks are applied in a logical sequence.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Teamwork may be required to complete specified work tasks on time and within budget.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical techniques should be used to measure and calculate materials required for establishing aggregate paths.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems may arise when interpreting the site plan and setting out the pathway.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be used in the compacting of aggregate.</td>
<td>1</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available.

What workplace information might be required for this standard? Workplace information may include survey and site plans, contract documents, specifications, procedures for disposing of waste materials, statutory obligations, work instructions or verbal instructions from the supervisor.

What OHS hazards may be associated with path installation? Hazards may include, heavy materials and equipment, slippery or uneven surfaces, moving machinery and vehicles, solar radiation, dust, noise, unprotected site debris, tools, equipment, trap and other hazards left unattended, excavated and unprotected holes, and ground level changes.

What are the personal protective clothing and equipment requirements associated with the installation of paths? Personal protective clothing and equipment may include steel capped boots/shoes, overalls, gloves, sun hat, sunscreen lotion, safety goggles, face mask and ear protectors.

What types of site plan and contract documents may be referred to? Job drawings, a landscape design, a computer generated plan, a concept plan or any other plan of the site drawn to scale, material specifications, performance outcomes and other responsibilities.

What are the OHS requirements in relation to the work site? The OHS requirements may include the erection of signage, barriers, witches hats and safety lights and includes the specific industrial conditions associated with safe work practices (e.g., noise, manual handling and use of chemicals).

What may be used as a survey benchmark? A survey benchmark may include a boundary line, a building or structure, a temporary benchmark, a datum point or a stringline or offset line.

What environmental impacts may result from installation of aggregate paths? Disturbance/trampling of vegetation and animal habitats, soil, introduction of foreign materials into bush sites, compaction from vehicles, materials storage, damage or severing of tree roots, and erosion through changes in water run-off.

What site problems may occur during construction? Soft spots, critical drainage issues and design problems.
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in installing aggregate paths requires evidence that work can be planned and prepared, that the area can be set out, the ground can be prepared, materials can be properly installed and compacted. The skills and knowledge required to install aggregate paths must be transferable to a different work environment. For example, this could include different locations, aggregate materials and existing soil conditions.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- OHS responsibilities of employees.
- OHS regulations regarding the erection of signs and barriers around the work area and responsibilities to the public.
- The environmental impact of soil disturbance when preparing the site and the environmental effects of altering water flow when installing paths.
- Setting out site for path construction.
- Reading of plans and contract documents.
- Different base and aggregate materials and their performance.
- Tools and equipment used for installing paths.
- Methods of disposing of soil and waste materials in order to minimise damage to the environment.
- Machinery used in path construction.
- Ordering and estimating materials.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Plan and prepare for installation and site safety.
- Set out the site for path construction.
- Undertake ground preparation.

- Lay surface aggregate materials.
- Make good the site.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTD2312A Inspect machinery for plant, animal and soil material

Unit Descriptor
This competency standard covers the process of formally inspecting machinery for material that may contribute to the spread of weeds, pests or diseases. It requires the ability to prepare for inspection, carry out thorough inspection of equipment, prepare reports and dispose of waste. Inspection is likely to be carried out under routine supervision and may involve operating in a team environment. Inspecting machinery for plant, animal and soil material requires knowledge of machinery and equipment operating features and major components, inspection points and procedures required by legislation, and how weeds, pests or diseases can spread through soil, animal or plant materials.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Inspect machinery and support vehicles
   1.1 Correct documentation for inspection, selected according to enterprise guidelines or legislative requirements.
   1.2 Machinery and support vehicles are made safe for inspection, supported safely, with free moving parts pinned or supported as required.
   1.3 Identity of machine and support vehicles is checked.
   1.4 Correct equipment for inspection selected.
   1.5 Covers and guards removed safely.
   1.6 All points identified in legislation or operating procedures are identified and inspected for contamination.
   1.7 Any samples collected during inspection process are correctly labelled and stored according to enterprise policies.

2. Inspect other equipment
   2.1 Areas on equipment likely to accumulate contaminants identified and inspected according to enterprise operating procedures.
   2.2 Waste materials disposed of according to enterprise operating procedures and relevant legislative requirements.

3. Report inspection results
   3.1 Results of inspection are recorded correctly on appropriate forms where required.
   3.2 Collected samples to accompany reports are secured and transported according to enterprise guidelines.
   3.3 Inspection reports are passed on to appropriate officer or authority.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<td>Communicating ideas and information</td>
<td>Communicating with clients and supervisors.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Visual inspection and through using checklist of inspection points.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Organising work schedules in order to carry out activities within time constraints.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Working with work team and supporting team activities in inspection and cleaning work.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Estimating quantities, reading and recording identification numbers.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Identifying parts of different machines likely to carry contaminants.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Recording and communicating results of inspections, and carrying out cleaning.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

How might the identity of machinery and support vehicles be made?

By make, model, serial number and registration number.

How can inspection of machinery and support vehicles be made?

Visually, or utilising an endoscope, torch, mirror or probe.

What sort of ancillary equipment may be included?

Agricultural machinery such as bins, augers, vehicles and comb trailer.
What other machinery may be relevant to this standard?

Hay balers, fodder rollers, bale wrappers, cotton pickers, module builders, potato harvesters, haymaking equipment, seeders, drills, planters, air-seeders, cultivators, tillage equipment, bins, augers, vehicles and comb trailer, any vehicle that has been operated in the work area and any other machinery used for agricultural, horticultural or earthmoving purposes.

Which legislation and operating procedures may be included?

State and Commonwealth noxious weeds legislation, regulations, operating procedures and checklists, with or without diagrams.

What do covers and guards incorporate?

Skid plates, mudguards, end covers, inspection plates and hatches, and top and bottom feeder housing.

Which support vehicles are included?

Those used to transport machinery or any vehicle that has been driven on potentially contaminated ground.

What may be included as machinery and equipment?

Rotary harvesters and conventional harvesters, bins, augers, earthmoving machinery, vehicles and comb trailer.

What disposal methods might be included?

Burning, burial or return to harvested field.

How can inspection of machinery be made?

Visually, or utilising an endoscope, torch, mirror or probe.

What enterprise requirements and regulatory guidelines may be relevant?

Policies, procedures and management plans, relevant occupational health and safety requirements, Codes of Practice, State and Federal quarantine legislation, and enterprise guidelines.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in inspecting machinery for plant, animal and soil material requires evidence that machinery has been thoroughly checked; sources of potential contamination have been identified and reported on. The skills and knowledge required for the inspecting machinery for plant, animal and soil material must be transferable to a range of work environments and contexts. For example, this could include different items of machinery and equipment, or different sources of contamination.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Machinery and equipment operating features.
- Major components of machinery and equipment.
- Inspection points and procedures required by legislation.
- Vectors for spread of weeds, pests or diseases.
What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Inspect machinery and support vehicles.
- Inspect other equipment.
- Dispose of waste materials.
- Report inspection results.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
# RTD2313A Clean machinery of plant, animal and soil material

## Unit Descriptor

This competency standard covers the process of cleaning machinery of material that may contribute to the spread of weeds, pests or diseases. It requires the ability to prepare for cleaning, carry out thorough cleaning of equipment and the appropriate disposal of waste. Cleaning is likely to be carried out under routine supervision and may involve operating in a team environment. Cleaning machinery of plant, animal and soil material requires knowledge of machinery and equipment operating features and major components, inspection points and procedures required by legislation, and how weeds, pests or diseases can spread through soil, animal or plant materials.

## Unit Sector

No Sector Assigned

## ELEMENT PERFORMANCE CRITERIA

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Check machinery and support vehicles | 1.1 Machinery and equipment are checked for contamination according to enterprise guidelines or legislative requirements.  
1.2 Machinery and support vehicles are made safe for checking, supported safely, with free moving parts pinned or supported as required.  
1.3 Covers and guards removed safely.  
1.4 All points identified in legislation or operating procedures are identified and inspected for contamination. |
| 2. Clean machinery and equipment | 2.1 Machinery is made safe for cleaning, supported safely, with free moving parts pinned or supported as required.  
2.2 Correct equipment for cleaning selected.  
2.3 Points listed in appropriate regulations, checklists or enterprise procedures are cleaned and checked.  
2.4 Guards replaced safely and checked.  
2.5 Areas on other equipment likely to accumulate contaminants identified, inspected and cleaned according to enterprise operating procedures. |
| 3. Complete cleaning work | 3.1 Waste materials are disposed of according to enterprise operating procedures and relevant legislative requirements.  
3.2 Records of cleaning are recorded on appropriate forms according to enterprise policy and procedures.  
3.3 The authorities are advised when contaminants are identified as being notifiable or of a potential threat. |
KEY COMPETENCIES
What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
<td>Working with others and in teams</td>
<td>Working with work team and supporting team activities in inspection and cleaning work.</td>
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</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

How can checking of machinery and support vehicles be made? Visually, or utilising an endoscope, torch, mirror or probe.

What sort of ancillary equipment may be included? Agricultural machinery such as bins, augers, vehicles and comb trailer.

What other machinery may be relevant to this standard? Hay balers, fodder rollers, bale wrappers, cotton pickers, module builders, potato harvesters, haymaking equipment, seeders, drills, planters, air-seeders, cultivators, tillage equipment, bins, augers, vehicles and comb trailer, any vehicle that has been operated in the work area and any other machinery used for agricultural, horticultural or earthmoving purposes.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which legislation and operating procedures may be included?</td>
<td>State and Commonwealth noxious weeds legislation, regulations, operating procedures and checklists, with or without diagrams.</td>
</tr>
<tr>
<td>What do covers and guards incorporate?</td>
<td>Skid plates, mudguards, end covers, inspection plates and hatches and top and bottom feeder housing.</td>
</tr>
<tr>
<td>Which support vehicles are included?</td>
<td>Those used to transport machinery or any vehicle that has been driven on potentially contaminated ground.</td>
</tr>
<tr>
<td>What may be included as machinery and equipment?</td>
<td>Rotary harvesters and conventional harvesters, bins, augers, earthmoving machinery, vehicles and comb trailer.</td>
</tr>
<tr>
<td>What may be involved in cleaning?</td>
<td>High-pressure water, compressed air, brushes or vacuum.</td>
</tr>
<tr>
<td>What sort of equipment for cleaning may be included?</td>
<td>Rod or probe (2m long), torch, screwdrivers, spanners, hammers, wire, compressor and brushes.</td>
</tr>
<tr>
<td>Where might cleaning be carried out?</td>
<td>Field, workshop or in wash-down areas.</td>
</tr>
<tr>
<td>What disposal methods might be included?</td>
<td>Burning, burial or return to harvested field.</td>
</tr>
<tr>
<td>What enterprise requirements and regulatory guidelines may be relevant?</td>
<td>Policies, procedures and management plans, relevant occupational health and safety requirements, Codes of Practice, State and Federal quarantine legislation, and enterprise guidelines.</td>
</tr>
</tbody>
</table>

**EVIDENCE GUIDE**

What evidence is required to demonstrate competence for this standard as a whole?

Competence in cleaning machinery for plant, animal and soil material requires evidence that machinery has been thoroughly checked, sources of potential contamination have been identified, and that thorough cleaning has been carried out. The skills and knowledge required for the cleaning of equipment of plant, animal and soil material must be transferable to a range of work environments and contexts. For example, this could include different items of machinery and equipment, or different sources of contamination.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Machinery and equipment operating features.
- Major components of machinery and equipment.
- Inspection points and procedures required by legislation.
- Vectors for spread of weeds, pests or diseases.
### What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Check machinery and support vehicles.
- Clean machinery and equipment.
- Complete cleaning work.

### Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

### Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD2402A Clear features that harbour pest animals

Unit Descriptor
This competency standard covers the process of clearing features and destruction of habitats that harbour pest animals without damaging native animal habitats and flora. It requires the ability to determine the scope of the work, prepare for the clearing job, clear features, destroy pest habitats and clean and store equipment and materials. Clearing features that harbour pest animal requires a knowledge of relevant legislation & regulations, OHS regulations, common law principles relating to property, stock, duty of care and due diligence, pest life cycles and behaviours, and habitats used by pest animals and by non target species for protection.

Unit Sector No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Determine clearing work required
1.1 Characteristics of the features that harbour the target pest are identified.
1.2 Locations of the habitat of the target pest are identified.
1.3 Approaches to work including estimated time required to clear features and destroy pest habitats are determined.
1.4 Hazards associated with the job are identified in accordance with OHS standards.
1.5 Environmental risks associated with the job are identified in accordance with statutory and local authority requirements.
1.6 Vehicles, equipment and materials required to complete the habitat destruction are identified.

2. Prepare for clearing and destruction work
2.1 Location and boundaries for the clearing are mapped in accordance with the pest management strategy and monitoring program.
2.2 Precautions to minimise hazards associated with the clearing are taken in accordance with OHS standards.
2.3 Precautions to minimise environmental risks associated with the clearing are taken in accordance with statutory and local authority requirements.
2.4 Vehicles, equipment and materials are checked for serviceability in accordance with manufacturer's specifications and relevant policies.
2.5 Actions to prevent interference with non-target species are taken as necessary.
2.6 Appropriate licences, permits and clearances are obtained prior to commencement of work.
3. Clear land and destroy pest habitats

3.1 Areas containing pest habitat are dogged prior to commencing destruction procedures if required.
3.2 Features and habitats which harbour target pest are cleared in accordance with industry practice.
3.3 Habitats are destroyed using approved procedures and techniques in accordance with industry practice.
3.4 Destroyed habitats are checked for remaining sites that can be accessed and restored by pest animals.
3.5 Remaining sites that can be accessed and restored by pest animals are made inaccessible.
3.6 Area is monitored over a prescribed period to detect signs of reinfestation.
3.7 Native and other valued flora are protected as required in accordance with environmental statutory requirements.
3.8 Debris is disposed of in accordance with industry practice.

4. Clean and store equipment and materials

4.1 Equipment and materials are cleaned and stored in accordance with relevant standards and policies.
4.2 Job completion is reported or recorded in accordance with relevant policies and procedures.

KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Clarify requirements and expectations for the job and liaise with work colleagues.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Inspect areas to be cleared and distinguish between features that harbour pest animals and features that provide protection for non-target species.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Organise own work activities.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Collaborate with work colleagues during work activities.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Perform mathematical operations - estimation of task duration.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Consider problems that arise during the job and determine contingency activities.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Apply modern clearing techniques and utilise equipment and materials.</td>
<td>2</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this unit of competency. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What are features? Food and water sources, physical cover such as warren, surface logs, refuse and vegetation clumps.

What approaches may be used to clear features? Modifications using machinery and equipment, installation of exclusion fencing or other structures, and chemical treatment.

What are the relevant federal, state legislation and local regulations that may be included? Environmental protection, pest animals, use of firearms (including licensing requirements and exemptions), humane treatment of animals, activities in nature reserves and heritage areas, chemicals, poisons and veterinary substances, identification and reporting of suspected outbreaks of exotic disease, OHS regulations, and common law principles relating to property, stock, duty of care and due diligence.

What might be included as resources? Human, financial, physical (traps, firearms, ammunition, poisons, fencing materials, veterinary products), land, air and water transport facilities and plant (excavators, front-end loaders).

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in clearing features which harbour pest animals requires evidence that techniques are relevant to pest, work is carried out to enterprise and industry standards and that native animal habitats and flora are not damaged during the work. The skills and knowledge required to clear features that harbour pest animals must be transferable to a range of work environments and contexts. For example, this could include different pest species, sites and techniques.

What specific knowledge is needed to achieve the performance criteria? Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Legislation & regulations relating to environmental protection.
- Legislation & regulations relating to pest animals.
- Legislation & regulations relating to activities in nature reserves and heritage areas.
- OHS regulations.
- Common law principles relating to property, stock, duty of care and due diligence.
- Risks to land users' posed by pest animals including exotic diseases and zoonoses.
- Pest life cycles and behaviours.
- Harbours used by pest animals.
- Harbours used by non-target species.
What specific skills are needed to achieve the performance criteria? To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Communicate with work colleagues.
- Use and maintenance of tools and equipment.
- Record and report task completion and, where necessary, observations of property status.
- Prepare for the clearing job.
- Destroy habitats that harbour pest animals.
- Clean and store equipment and materials.

Are there other competency standards that could be assessed with this one? This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD2403A Conduct vertebrate pest activities from aircraft

Unit Descriptor
This competency standard covers the process of conducting a range of pest control activities from the air. It requires the ability to apply air safety principles, safely handle and stow materials and equipment in aircraft, and plot locations and activities. Conducting pest control activities from aircraft requires knowledge of relevant legislation, pest behaviour and physiology, air safety principals and emergency procedures appropriate to the firearms and/or bait handling.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Apply air safety procedures
   1.1 Location and boundaries for the activities are confirmed with the pilot.
   1.2 Time and duration of the flight are checked and relevant personnel notified.
   1.3 Flight plans and search and rescue operations are confirmed with the pilot and ground crew.
   1.4 On board emergency equipment is checked with pilot.
   1.5 Emergency landing procedures are checked with the pilot.
   1.6 Landing site requirements are checked.
   1.7 Intent to approach or leave the aircraft is confirmed with the pilot.
   1.8 Aircraft is approached in the recommended safe manner.

2. Conduct activities from aircraft
   2.1 Equipment is stowed safely on the aircraft.
   2.2 Harnesses and helmet are worn as required during pest control activities.
   2.3 Route and location of activities are accurately plotted on property, local or regional map.
   2.4 Activities are documented and reported in accordance with enterprise procedures.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Clarify requirements and expectations for the job, liaise with work colleagues during work activities, and document work activities in writing.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Determine materials and equipment requirements.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Organise own work activities.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Collaborate with work colleagues during work activities.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Plot route and location on property, local or regional map.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Consider problems that arise during the job and determine contingency activities.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Support the aircraft pilot as required.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this unit of competency. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What are the relevant Federal, State legislation and local regulations that may be included?

- Environmental protection, vertebrate pests, use of firearms (including licensing requirements and exemptions), humane treatment of animals, activities in nature reserves and heritage areas, poisons and veterinary substances, identification and reporting of suspected outbreaks of exotic disease, OHS regulations, and common law principles relating to property, stock, duty of care and due diligence.

What safe stowing and loading procedures are relevant to this standard?

- Firearms are to be unloaded and stowed in safety mode with muzzle pointing in safe direction away from personnel and critical aircraft components as necessary.
**What safe handling procedures are relevant to this standard?**

Firearms are handled safely with muzzle horizontal or pointing towards the ground and outside the aircraft during loading and unloading as required. Baits are safely ejected from the aircraft in pre-determined locations in accordance with the pest control strategy.

**What might be included as resources?**

Human, financial and physical (firearms, ammunition, poisons, veterinary products).

**What documentation will be included?**

All relevant documents.

---

**EVIDENCE GUIDE**

What evidence is required to demonstrate competence for this standard as a whole?

Competence in conducting pest control activities from aircraft requires evidence that pest control activities have been safely and appropriately completed in an aircraft according to enterprise guidelines and industry best practice. The skills and knowledge required to conduct pest control activities from aircraft must be transferable to a range of work environments and contexts. For example, this could include different pests, aircraft, firearms and activities.

**What specific knowledge is needed to achieve the performance criteria?**

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Relevant legislation.
- OHS regulations.
- Common law principles relating to property, stock, duty of care and due diligence.
- Risks to land users posed by pests.
- Emergency procedures appropriate to the firearms and/or bait handling.

**What specific skills are needed to achieve the performance criteria?**

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Plan own work activities.
- Manage own time.
- Apply air safety principles.
- Read maps and plot locations.

**Are there other competency standards that could be assessed with this one?**

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

**Essential Assessment Information**

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
**RTD2405A Tag and locate Judas animals**

**Unit Descriptor**
This competency standard covers the process of using judas' animals to locate isolated pest animals. It requires the ability to capture and tag judas' animals, operate radio-telemetry equipment, use firearms, administer tranquillising drugs and clean and maintain equipment. Tagging and locating judas' animals requires knowledge of relevant legislation, pest animal life cycles and behaviours, animal welfare and relevant emergency procedures.

**Unit Sector**
No Sector Assigned

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Prepare for judas' animal operation | 1.1 Target pest animal range and behaviour are confirmed.  
1.2 Time required to complete the location of target animals is estimated.  
1.3 Hazards associated with the procedures are identified in accordance with OHS standards.  
1.4 Environmental risks associated with the procedures are identified in accordance with statutory and local authority requirements.  
1.5 Resources required to complete the procedures are identified.  
1.6 Permission to release pest animal is obtained as necessary.  
1.7 Operation of radio-telemetry equipment is checked in accordance with manufacturer's instructions.  
1.8 Assistance is provided as tranquillising drugs are prepared and administered in accordance with veterinary procedures by authorised person.  
1.9 Appropriate animal is selected and tagged with radio transmitting collar in accordance with humane animal handling techniques. |
| 2. Locate isolated herd | 2.1 'Judas' animal is released in targeted location.  
2.2 Reasonable time lapse is allowed for 'judas' animal to join mob of same species.  
2.3 Radio-telemetry equipment is operated in accordance with manufacturer's instructions.  
2.4 Herd is located and approached to optimise effectiveness of control method. |
| 3. Control target species | 3.1 Isolated mob is mustered, harvested or destroyed in accordance with statutory requirements and industry practice.  
3.2 'Judas' animal is released or allowed to escape to join other mobs as required. |
| 4. Clean and store equipment and materials | 4.1 Equipment and materials are cleaned and stored in accordance with relevant standards and policies.  
4.2 Job completion is reported or recorded in accordance with relevant policies and procedures. |
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
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<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Clarify requirements and expectations for the job, liaise with work colleagues during work activities, and document work activities in writing.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Assess signs and signals to locate isolated animals.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Organise own work activities.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Collaborate with work colleagues during work activities.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Calculate animal numbers, times and distances.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Consider problems that arise during the job and determine contingency activities.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Operate radio telemetry equipment.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this unit of competency. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What are the relevant Federal, State legislation and local regulations that may be included?

Environmental protection, pest animals, use of firearms (including licensing requirements and exemptions), humane treatment of animals, activities in nature reserves and heritage areas, poisons and veterinary substances, identification and reporting of suspected outbreaks of exotic disease, OHS regulations, and common law principles relating to property, stock, duty of care and due diligence.

What is meant by Judas' animal in these standards?

An animal that has been trapped, fitted with a collar containing a radio transmitter and released to join remaining animals and thereby reveal their location.

Which pest animals may be included in this standard?

Goats, horses, pigs, camels, cattle, water buffaloes and donkeys.
What might be included as resources?
Human, financial and physical (traps, firearms, ammunition, poisons, fencing materials and veterinary products) and land, air and water transport facilities.

What documentation may be included?
All relevant documents.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?
Competence in tagging and locating judas' animals requires evidence that animals have been successfully tagged and located according to enterprise guidelines and industry best practice. The skills and knowledge required to tag and locate judas' animals must be transferable to a range of work environments and contexts. For example, this could include different animals, location-finding equipment, habitats and situations.

What specific knowledge is needed to achieve the performance criteria?
Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Relevant legislation.
- OHS regulations.
- Common law principles relating to property, stock, duty of care and due diligence.
- Risks to land users posed by pest animals including exotic diseases and zoonoses.
- Pest animal life cycles and behaviours.
- Animal welfare.
- Relevant emergency procedures.

What specific skills are needed to achieve the performance criteria?
To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Prepare judas animals.
- Locate isolated herd.
- Control target species.
- Clean and store equipment and materials

Are there other competency standards that could be assessed with this one?
This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information
For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD2501A Maintain cultural places

Unit Descriptor
This competency standard covers the process of maintaining cultural places as instructed by supervisors. It requires the ability to prepare for maintenance, maintain condition of place and protect cultural places. Maintaining cultural places requires knowledge of maintenance needs for a site, techniques of site protection, range of maintenance works undertaken on cultural sites, requirements of legislation and enterprise in conservation of place and enterprise procedures relating to the reporting of deterioration or damage to place or reporting of incidents.

Note: For Indigenous cultural places, the delivery and assessment against this competency standard must comply with community protocols and guidelines and be supported by elders and custodians of country.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Assess maintenance work required
   1.1 Works required under the plan of management and enterprise procedures are identified.
   1.2 Machine, equipment and materials to carry out maintenance works are identified.
   1.3 Type and amount of materials required for maintenance work are estimated.

2. Prepare for maintenance
   2.1 Machine, equipment and materials to carry out maintenance works are organised.
   2.2 Safety equipment and materials are prepared and assembled according to enterprise OHS policy.

3. Maintain condition of place
   3.1 Maintenance work is undertaken according to work programs and according supervisors instructions.
   3.2 Presence of threats is reported to supervisor.
   3.3 Evidence of deterioration and wear is reported to supervisor.
   3.4 Site is made good on completion of maintenance works according to supervisor's instructions enterprise guidelines.

4. Protect cultural places
   4.1 Any evidence of damage to place is reported to supervisor.
   4.2 Any breach of legislation or enterprise regulations is reported to supervisor.
   4.3 Protective barriers and signs are maintained according to enterprise procedures.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Notify non-compliance, pest and disease problems.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Maintenance works, pest and diseases, condition of place.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Maintenance program, machinery and equipment.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Carrying out maintenance works.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Estimating time, materials and labour.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>When preparing and carrying out works.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Machinery and equipment for maintenance activities, communications systems.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which cultural places of areas may be included? Areas of non-indigenous activity, buildings and other structures, natural areas of indigenous cultural significance, historical events and monuments, areas of indigenous activity such as burial, occupation and contact sites, engravings, grinding grooves, sacred trees, rock pictures, fish traps, middens and mounds.

What is maintenance in accordance with? The plan of management, which may contain general actions for an area or specific actions for a place.

Which threats may be included? Pest plants, animals, and site visitors/tourists.

Which types of deterioration or wear may be included? Wear or fretting due to the impact of weathering, vandalism, wear due to use, which may either detract from the significance or be part of the significance, decay and rust.
Which types of damage may be considered?

Human, vehicles and animals, either accidental or intentional damage from pests including fungi, rising damp (salt damp), dust, flooding and storms.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in maintaining cultural places requires evidence that a cultural site or place has been appropriately maintained according to community and agency guidelines and best practice procedures. The skills and knowledge required to maintain cultural places must be transferable to a range of work environments and contexts.

For example, this could include different cultural sites, locations and maintenance techniques.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- OHS responsibilities.
- Common pests and diseases.
- Techniques of site protection.
- Range of maintenance works undertaken on cultural sites.
- Enterprise procedures relating to the reporting of deterioration or damage to place or reporting of incidents.
- Site recording systems used by the enterprise or community.
- Relevant archaeological practices and procedures.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Assess maintenance work required.
- Prepare for maintenance.
- Maintain condition of place.
- Protect cultural places.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
### RTD2502A Maintain wildlife habitat refuges

**Unit Descriptor**

This competency standard covers the process of maintaining wildlife habitats and refuges to protect desirable animal species from predators. It requires the ability to assess the scope of the refuge maintenance job, prepare for the work, maintain wildlife habitat refuges, and clean and store equipment and materials. Maintaining wildlife habitat refuge for protection of desirable animal species requires knowledge of relevant legislation and regulations, common law principles relating to property, stock, duty of care and due diligence, vertebrate pest life cycles and behaviours, harbours used by vertebrate pests, and harbours used by desirable animal species.

**Unit Sector**

No Sector Assigned

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Assess the scope of the refuge maintenance job</td>
<td>1.1 Desirable wildlife species to be protected are identified and their behaviour pattern determined.</td>
</tr>
<tr>
<td></td>
<td>1.2 Characteristics of wildlife habitat refuges are identified.</td>
</tr>
<tr>
<td></td>
<td>1.3 Locations of wildlife habitat refuges are determined.</td>
</tr>
<tr>
<td></td>
<td>1.4 Time required to complete the wildlife habitat refuge maintenance job is estimated.</td>
</tr>
<tr>
<td></td>
<td>1.5 Hazards associated with the wildlife habitat refuge maintenance job are identified in accordance with OHS standards.</td>
</tr>
<tr>
<td></td>
<td>1.6 Environmental risks associated with the wildlife habitat refuge maintenance job are identified in accordance with statutory and local authority requirements.</td>
</tr>
<tr>
<td></td>
<td>1.7 Vehicles, equipment and materials required to complete the wildlife habitat refuge maintenance job are identified.</td>
</tr>
<tr>
<td>2. Prepare for the refuge maintenance job</td>
<td>2.1 Location and boundaries for the wildlife habitat refuge maintenance job are determined in accordance with the vertebrate pest management strategy and monitoring program.</td>
</tr>
<tr>
<td></td>
<td>2.2 Precautions to minimise hazards associated with the wildlife habitat refuge maintenance job are taken in accordance with OHS standards.</td>
</tr>
<tr>
<td></td>
<td>2.3 Precautions to minimise environmental risks associated with the wildlife habitat refuge maintenance job are taken in accordance with statutory and local authority requirements.</td>
</tr>
<tr>
<td></td>
<td>2.4 Vehicles, equipment and materials are checked for serviceability in accordance with manufacturer's specifications and relevant policies.</td>
</tr>
<tr>
<td>3. Maintain wildlife habitat refuges for protection of desirable species from predators</td>
<td>3.1 Vehicles and equipment are operated and/or driven in accordance with manufacturer's instructions, statutory requirements and industry practice.</td>
</tr>
<tr>
<td></td>
<td>3.2 Wildlife habitat refuges which protect desirable animal species are maintained in accordance with industry practice and environmental statutory requirements.</td>
</tr>
<tr>
<td></td>
<td>3.3 Desirable animal species are protected as required in accordance with environmental statutory requirements.</td>
</tr>
<tr>
<td></td>
<td>3.4 Debris is disposed of in accordance with industry practice.</td>
</tr>
</tbody>
</table>
4. Clean and store equipment and materials

4.1 Equipment and materials are cleaned and stored in accordance with relevant standards and policies.

4.2 Job completion is reported or recorded in accordance with relevant policies and procedures.

KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Clarify requirements and expectations for the job and liaise with work colleagues.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Inspect areas to be maintained and distinguish between features which harbour pests and features which provide protection for desirable animal species.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Organise own work activities.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Collaborate with work colleagues during work activities.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Perform mathematical operations - estimation of task duration.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Consider problems that arise during the job and determine contingency activities.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Apply modern techniques and utilise equipment and materials.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this unit of competency. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What are desirable wildlife species? Native animals that are not targeted as vertebrate pests.

What wildlife habitat maintenance work may be relevant to this standard? Monitoring of vertebrate pest occurrence, trapping of pest animals, removal of pest habitats, planting of vegetation including revegetation of open areas, and installation of structures including exclusion fencing.
What are the relevant federal, state legislation and local regulations that may be included?

Environmental protection, threatened species conservation, vertebrate pests, humane treatment of animals, activities in nature reserves and heritage areas, poisons and veterinary substances, identification and reporting of suspected outbreaks of exotic disease, OHS regulations, and common law principles relating to property, stock, duty of care and due diligence.

What might be included as resources?

Human, financial, physical (traps, firearms, ammunition, poisons, fencing materials, veterinary products), land, air and water transport facilities and plant (excavators, front-end loaders), and plant materials.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in maintaining wildlife habitat refuge for protection of non-target animals from predators requires evidence that a site has been selected, assessed and maintained according to enterprise and industry standards. The skills and knowledge required to maintain wildlife habitat refuge for protection of native species from predators must be transferable to a range of work environments and contexts. For example, this could include different wildlife habitats and locations and predators.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Relevant legislation and regulations.
- Common law principles relating to property, stock, duty of care and due diligence.
- Risks to land users’ posed by vertebrate pests including exotic diseases and zoonoses.
- Vertebrate pest life cycles and behaviours.
- Harbours used by vertebrate pests.
- Wildlife habitats used by desirable animal species.
- Wildlife habitat modification techniques.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Communicate with work colleagues.
- Use and maintenance of tools and equipment.
- Record and report task completion and, where necessary, observations of property status.
- Prepare for the refuge maintenance job.
- Maintain wildlife habitat refuges for protection of desirable animal species from predators.
- Clean and store equipment and materials.
Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
### RTD2703A Operate in isolated and remote situations

**Unit Descriptor**

This competency standard covers the ability to plan, prepare for and work safely in isolated and remote situations. Operating in isolated and remote situations requires knowledge of maps and mapping reading, local topography, nearby inhabitants and locations within that area, survival techniques and human needs relating to survival situations, clothing requirements for sun or heat protection, basic first aid, and the operation of communication equipment and distress signalling.

**Unit Sector**

No Sector Assigned

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Plan for operating in remote environments | 1.1 Information relating to the operating environment and location is collated and recorded to meet established enterprise policy.  
1.2 Detailed operating and travel plans, including a disaster plan and fallback position requirements are established in consultation with supervising staff.  
1.3 Appropriate authorities are notified of the action plans and time schedules according to enterprise policy.  
1.4 Relevant maps are identified and sourced. |
| 2. Prepare for operating in remote environments | 2.1 Personal needs are prepared for activities or travel in remote areas.  
2.2 **Transportation** and equipment are prepared for use in prescribed work location or along prescribed routes.  
2.3 Relevant maps are obtained and studied prior to departure.  
2.4 **Planned activities** and itinerary are accurately reported and recorded prior to departure in accordance with enterprise requirements. |
| 3. Prepare for emergency situations | 3.1 Provisioning meets expected operational and possible emergency needs.  
3.2 Initial **planning** and regular monitoring ensures structured usage of available provisions and resources.  
3.3 Operating plan is structured to include training in remote area survival techniques prior to operating in remote situations.  
3.4 Emergency management procedures are included as an integral part of operating plans and enterprise policy. |
| 4. Operate in remote environments | 4.1 Activities are completed according to instructions and established time schedules.  
4.2 All activities carried out in remote situations are executed in accordance with prescribed procedures.  
4.3 Emergency situations are handled in accordance with prescribed procedures and enterprise policy.  
4.4 Established reporting procedures are followed on completion of planned activities and on return to base in line with enterprise policy. |
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Travel and work plans with the industry network and enterprise management.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Geography, meteorology and local conditions and working requirements.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Safe working activities in remote environments.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Achieving group goals and targeted outcomes for remote area work or travel.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Calculate distance, capacity and rations.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Isolation, loss of direction or emergency, dealing with incidents.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Equipment for communication, location and direction finding.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which remote environments may be included?

Any work place where the ability to get help because of distance is such that personal safety may be at risk.

Which types of working situations may be included?

Working alone or in teams.
| What methods of planning may be included? | Establishment of time schedules and intended outcomes in consultation with managers and supervising staff. Provisioning for extreme circumstances, including worst case scenario. Identification of alternative routes, available water supplies and travel conditions such as checks of actual and forecast weather conditions. Consideration of any unplanned deviation from the planned route, itinerary or timing including the work processes involved. Establishment of rescue plans and the consideration of what circumstances might require such an operation to be mounted. |
| Which enterprise procedures and policy may be relevant? | Guidelines and reporting procedures for personnel operating in remote environments. |
| What documentation will be included? | Personal diary records as well as property records. |
| What operational strategies may be considered? | Planned provision of water and other survival clothing and requisites sufficient to meet the needs of all personnel. |
| What structured usage of provisions may be required? | Available provisions and resources used at a rate that sustains the individual or party and will last if possible until the end of any possible delays or emergency situations. |
| What emergency equipment might be relevant to this standard? | First aid supplies, spare parts, telephones, two way radios and repair tools for the selected form of transportation, retrieval, communications, prescribed emergency equipment for water travel and emergency beacons and other position location devices. |
| What emergency planning should be included? | Establishment of contingency plans ("fall back position"). |
| What personnel briefings may be included? | Provision of advice on intended routes, work locations, maps and direction finding equipment. |
| What training in remote area survival techniques may be relevant? | Managing emergencies, location and/or distilling of water, provision and erection of shelter, conservation of energy, the identification and use of wild food (bush tucker), GPS position locating, setting out beacons and distress signalling, staying put or remaining with transport and communicating with rescue teams. |
| What personal equipment may be included? | Water generating, shade generating gear and non-perishable survival rations, and clothing to provide for the worst case scenario. |
| What forms of communication are relevant? | Two-way radio, satellite radio/phone, marine radio or mobile telephone. |
What methods of distress signalling may be included? EPIRBs, signalling mirrors, fire or signals scratched on the ground.

Which appropriate authorities may be included? The property manager, other staff or recognised regulatory authorities (e.g., Police, Maritime Safety Authority, State Emergency Service, and Civil Aviation Authority).

What emergency situations may be relevant to this standard? Vehicle or equipment breakdown, lack of food, water or protective clothing, flood, fire or storm.

Which relevant licensing may be included? Operating vehicles on roads, heritage reserves or public reserves, radio communications equipment.

**EVIDENCE GUIDE**

What evidence is required to demonstrate competence for this standard as a whole?

Competence in operating in isolated and remote situations requires evidence that an individual has demonstrated the knowledge and skills that would enable them to work safely in isolated and remote situations according to enterprise guidelines and industry best practice. The skills and knowledge required to operate in isolated and remote situations must be transferable to a range of work environments and contexts. For example, this could include different environments, situations and emergencies.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Map reading and navigation skills including direction finding (e.g., GPS, use of compass, stars or watch).
- Local topography, nearby inhabitants and locations within that area.
- Survival techniques and human needs relating to survival situations.
- Clothing requirements for sun or heat protection.
- Basic first aid.
- Bush craft including making a fire, cooking and wild food gathering.
- Water supplies, sources and generation methods.
- Emergency vehicle and mechanical equipment repair.
- The operation of communication equipment (e.g., field communications by two-way, satellite telephony and HF radio), and distress signalling including use of signalling mirrors.
- Weather and weather indicators.
- Basic rope skills including useful knots (reef, clove hitch, truckie's hitch, bowline); simple lashings and tying down loads.
What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Plan for operating in remote environments.
- Prepare for operating in remote environments.
- Prepare for emergency situations.
- Operate in remote environments.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
Record information about country

This competency standard covers the process of recording information and knowledge on country - from both an Indigenous and non-Indigenous perspective. It requires the ability to collect and assess information and document information according to community guidelines and protocols. Recording information about country requires knowledge of a designated area and the features of the country, names for plants and animals, and protocols and the customs relating to disclosure of information about country.

Note: Delivery and assessment against this competency standard must comply with community protocols and guidelines and be supported by elders and custodians of country.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Collect information
   1.1 Boundaries and extent of country are determined according to community guidelines and protocols.
   1.2 Plant and animal species are identified by local or common name.
   1.3 Special features and sites of country are identified.
   1.4 Knowledge on relationships of plants and animals is investigated from Indigenous land and sea management and cultural perspectives.
   1.5 Information on relevant management practices for country is investigated.
   1.6 History of dispossession is acquired from community sources and available literature.
   1.7 Simple food chains relevant to country are defined.

2. Review changes
   2.1 Environmental changes since dispossession and the impacts of these changes on plant and animal communities are identified.
   2.2 Environmental trends and their potential impacts on country are documented.
   2.3 Land and sea management practices that address environmental change are recorded.

3. Document information
   3.1 Information about country is recorded according to community guidelines and protocols.
   3.2 Access to information is provided to those who are authorised according to community guidelines and protocols.
   3.3 Ownership of information is appropriately recognised and recorded.
   3.4 Conditions and parameters defining use of information is clearly documented.
KEY COMPETENCIES
What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Communication of ideas and information can be applied orally, in written or electronic format.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information can be collected, analysed and organised through community consultation with Indigenous peoples.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Activities can be planned and organised according to community guidelines and protocols.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Teamwork can be applied in collecting, sharing, demonstrating and analysing information.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical ideas and techniques can be applied in assessing the size of plant and animal communities.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problem solving skills can be applied in assessing and discussing with Indigenous communities environmental changes to country.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>The use of technology such as photography can be applied in recording information and assessing environmental impacts with permission from traditional owners.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What is country? Country is an area of land and/or water with cultural significance to a group.

What ecological concepts may be relevant to this competency standard? Ecological concepts include niche, habitat, community, ecosystem, food webs/chains, species and relationships, plant and animal succession.
### How can ecosystems be defined?
An ecosystem is defined by habitat and vegetation and includes the animals of the space, the weather and soil and the cycle of energy and nutrients.

### What methods of recording may be relevant to this standard?
Recording may include written documentation, illustration or commitment to memory.

### What may be included in environmental changes?
The introduction of pollution, chemicals, weeds, feral animals and introduced pests to the environment.

### What chemical substances may be included?
Pesticides, herbicides, fertilisers, heavy metals, acid wastes and any other chemicals in the soil, air or water that effect the food chain or other cycles.

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### EVIDENCE GUIDE
What evidence is required to demonstrate competence for this standard as a whole?
Competence in recording information about country requires evidence that information about country has been appropriately acquired and recorded according to community guidelines and protocols. The skills and knowledge required for recording information about country must be transferable to a range of work environments and contexts. For example, this could include different recording media, management practices and approaches and areas within country.

### What specific knowledge is needed to achieve the performance criteria?
Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Designated areas and features of country.
- Local and/or common names for plants and animals.
- Basic ecological concepts.
- Protocols and customs relating to disclosure of knowledge about country.

### What specific skills are needed to achieve the performance criteria?
To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Collect information.
- Document information.
- Operate according to community guidelines and protocols.

### Are there other competency standards that could be assessed with this one?
This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.
Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
**RTD2803A Observe and report plants and/or animals**

**Unit Descriptor**
This competency standard covers tasks associated with the observation, recording and reporting on the presence of plants and/or animals against criteria provided by a supervisor or as required under legislation or regulations. It requires the ability to plan and organise observations, collect and record information and report data usually under routine supervision. Observing and reporting on plants and animals is likely to be under routine supervision with intermittent checking. Competency involves the application of knowledge and skills to a range of observation and reporting situations usually within established workplace routines.

**Unit Sector**
No Sector Assigned

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Plan and organise observations</td>
<td>1.1 Defined process for observation is prepared and agreed by supervisor.</td>
</tr>
<tr>
<td></td>
<td>1.2 Equipment for observation is obtained according to enterprise procedures.</td>
</tr>
<tr>
<td></td>
<td>1.3 Requirements under legislation, protection agreements and enterprise procedures for species are noted.</td>
</tr>
<tr>
<td>2. Collect information and record</td>
<td>2.1 Plants and animals and/or their presence are identified orally or from field guides to enterprise guidelines.</td>
</tr>
<tr>
<td></td>
<td>2.2 Plants and animals and/or samples are collected as required under enterprise guidelines.</td>
</tr>
<tr>
<td></td>
<td>2.3 Protection and quarantine requirements under legislation, protection agreements and enterprise procedures for species are observed.</td>
</tr>
<tr>
<td></td>
<td>2.4 Observation activities minimise degradation and disturbance and comply with legislation and OHS requirements.</td>
</tr>
<tr>
<td>3. Report data</td>
<td>3.1 Information on observed plants and animals are recorded and organised according to enterprise guidelines.</td>
</tr>
<tr>
<td></td>
<td>3.2 Information is communicated to supervisors according to enterprise guidelines.</td>
</tr>
<tr>
<td></td>
<td>3.3 Records are compatible with enterprise recording and database arrangements.</td>
</tr>
<tr>
<td></td>
<td>3.4 Occurrence of an organism is plotted and described using maps and grid references.</td>
</tr>
</tbody>
</table>
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Verbal and written reports.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Presence of fungi, plants and animals.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Timelines, equipment and materials for observation work.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Seeking advice from others in dealing with problems, coordinating observations.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Counting and estimating plants and animals.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Planning and conducting observations, recognising situations requiring notification.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Observation and measuring equipment.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which levels of scientific names are used for plant identification?  
Family, genus and species.

Which levels of scientific names are used for animal identification?  
Order, family, genus and species as appropriate.

Which plant species to be reported may be included?  
Listed threatened species, listed notifiable or noxious weeds, plants not previously seen at regularly visited site, plants to be reported under enterprise or industry guidelines.

Which animal species to be reported may be included?  
Listed threatened species, listed notifiable species, animals not previously seen at regularly visited site, invertebrates, aquatic organisms, and animals to be reported under enterprise or industry guidelines.
What could lists include? Written descriptions, drawn illustrations or photographs presented in any media, enterprise lists of plants, lists of noxious plants, feral or dangerous animals. Lists may vary according to land use and habitat of subject area.

To whom should plants be reported? The supervisor or appropriate authority, as set out in enterprise procedures.

Which protection and quarantine arrangements are relevant to this standard? Personal protection, restriction on the movement of species and/or associated hygiene arrangements, and protection of rare-endangered species.

What enterprise requirements and regulatory guidelines may be relevant? Policies, procedures and management plans, relevant OHS requirements, and Codes of Practice or enterprise guidelines.

Which forms of workplace communication is relevant to this competency standard? Field guides to identify species, obtaining advice, communicating with staff and the public, and taking notes.

**EVIDENCE GUIDE**

What evidence is required to demonstrate competence for this standard as a whole?

Competence in observing and reporting on plants and animals requires evidence that specific species of plants or animals (or their presence) have been recognised in the field and reports to the appropriate authorities or supervisor.

The skills and knowledge required to observe and report on plants and animals must be transferable to a range of work environments and contexts. For example, this could include different designated areas and plant or animal species. Occupational Health & Safety standards must be observed at all times.

What specific knowledge is needed to achieve the performance criteria? Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Criteria used to group species.
- Common and scientific names of plants and animals.
- Biological species occurring in the study area.
- The importance, value or potential impact of the species in a designated area.
- Rare and endangered species.
- Undesirable plants (e.g., weeds) and animals.
- Maps and grid references.
What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Plan and organise observations.
- Collect information and record.
- Interpret data.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3034A Implement revegetation works

Unit Descriptor
This competency standard covers the process of implementing revegetation works. It requires the ability to prepare equipment and materials for revegetation, prepare a planting site, undertake revegetation works, and maintain a revegetated site. Implementing revegetation works requires knowledge of factors affecting the timing and method of planting, identification of plant pests and diseases, revegetation techniques, physiology of plant growth, plant selection and culture, soils and plant nutrition, and calculations for materials.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare equipment and materials
   1.1 Tools and materials are selected for the task to be undertaken according to manufacturers guidelines and Occupational Health & Safety (OHS) regulations.
   1.2 Plant materials are identified, obtained and stored according to enterprise guidelines.
   1.3 Labour and machinery requirements are estimated and organised.
   1.4 Schedule of works is prepared and provided to management/client.

2. Prepare the revegetation site
   2.1 Site preparation is undertaken according to planting plan and/or supervisor's instructions.
   2.2 Soil ameliorants are used if necessary according to job specifications.
   2.3 Revegetation site is marked out according to supervisor's directions and/or plans.
   2.4 All competing plants, debris and pollutants are treated according to enterprise guidelines.
   2.5 Treatments are selected and applied according to enterprise guidelines and manufacturers instructions.
   2.6 Protective structures are installed as required.

3. Effect revegetation works
   3.1 Revegetation works are effected according to enterprise guidelines.
   3.1 All plants materials are inspected prior to revegetation works and defective materials are discarded.
   3.2 Plant materials to be installed are treated according to enterprise guidelines.
   3.3 Plant materials are installed according to planting program and enterprise guidelines.
   3.4 Remedial action is undertaken to ensure all of the revegetation program requirements have been implemented.
   3.5 Potential threats to revegetation works are identified and reported according to enterprise guidelines.
4. Maintain revegetated site

4.1 Site is maintained according to the planting program requirements and enterprise guidelines.

4.2 Remedial action and plant protection is undertaken according to the needs of the species.

4.3 Tools and equipment are cleaned, maintained and stored consistent with manufacturers’ specifications and enterprise guidelines.

KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Inform fellow workers of works.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Schedule of works.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Equipment, machinery and materials.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Carrying out revegetation works.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Calculation of materials.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Defects in materials, problems requiring remedial action.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Tools and equipment.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What sorts of site conditions may be included?

Soil types, moisture content, pH levels, salinity, texture, compaction, aspect, pollutants, toxicity, climate, buildings, road works and shade.

Which species selected may be relevant to this standard?

Native and exotic plants.
Which plant materials might be included? Seedlings, seeds, cuttings, divisions, bulbs, corms, rhizomes, or transplanted stock.

Which establishment methods may be used? Hand planting, mechanical planting, direct seeding, encouragement of natural regeneration, mechanical sowing and fire.

Which forms of earthworks may be considered? Irrigation, drainage, ripping, cultivating and clearing debris.

What sorts of growing requirements may be included? Time of planting, pruning, depth and drainage.

How might maintenance be undertaken? By watering, mulching, fertilising, protection, staking and weeding.

Which protective structures might be included? Signs, fences, barriers, cloches, stakes and mulches.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in implementing revegetation works requires evidence that a site has been appropriately revegetated and maintained according to enterprise guidelines and industry best practice. The skills and knowledge required to implement revegetation works must be transferable to a range of work environments and contexts. For example, this could include different environments, plant species and revegetation techniques.

What specific knowledge is needed to achieve the performance criteria? Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Revegetation techniques.
- Ecosystems, provenance and habitat requirements.
- Factors affecting the timing and method of planting.
- Identification of pests and diseases of trees.
- Principles and methods relating to the prevention and control of pests and diseases.
- Safety requirements when handling and using hazardous goods.
- Nutrient requirements of a range of plant species and cultivars.
- Physiology of plant growth.
- Techniques for protecting and securing/anchoring trees and shrubs.
- Plant selection and culture.
- Soils and nutrients.
- Calculations for materials.
What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Prepare equipment and materials.
- Prepare a planting site.
- Effect revegetation works.
- Maintain revegetated site.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
**RTD3125A Respond to wildlife emergencies**

**Unit Descriptor**
This competency standard covers the process of evaluating and coordinating a response to natural resource emergencies involving fauna. It requires the ability to evaluate the type of emergency, implement and coordinate a response to the emergency, care for affected animals, determine management options, remove animal carcasses and complete debrief and prepare reports. Responding to wildlife emergencies requires a knowledge of animal biology and general behaviour, health risks associated with animals, public relations and media management, incident management systems, state/territory emergency procedures and networks and machinery and equipment operation.

**Unit Sector**
No Sector Assigned

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Evaluate wildlife emergency | 1.1 Nature of emergency is investigated from eyewitnesses and/or inspection to determine what procedures should be implemented.  
1.2 Assessment of the incident is made to identify **key factors that may impact on an appropriate response**.  
1.3 State/Territory authorities are notified of incident according to enterprise guidelines.  
1.4 Interim care of animals is implemented where appropriate and according to enterprise procedures pending instructions from authorities.  
1.5 Appropriate staff are deployed in interim care for animals according to assessment of incident and enterprise guidelines.  
1.6 Personnel assisting in interim care are appropriately equipped and briefed according to enterprise and legislative requirements.  
1.7 Care instructions from authorities and/or veterinarians are implemented according to legislative and enterprise requirements.  
1.8 Information is collected about the reported situation to determine response.  
1.9 Informants are interviewed to obtain necessary details about the reported situations. |
2. Implement response to emergency

2.1 Nature of emergency is investigated from eyewitnesses and/or inspection to determine what procedures should be implemented.

2.2 Communications to manage situation are established to enterprise policies and procedures.

2.3 **Resources** and personnel are transported to site to implement action to enterprise procedures.

2.4 Site procedures are established to legislative requirements, enterprise procedures and emergency plans to control risks to people, the environment and to property.

2.5 Live fauna are moved in accordance with legislative and enterprise procedures.

2.6 Dead fauna are removed from site and biological matter is disposed of in accordance with enterprise procedures and health and safety requirements.

2.7 Site is cleaned in accordance with enterprise procedures to maintain public and environmental health and safety.

2.8 Measures are implemented that minimise risk to significant places, area, habitats, species and communities.

3. Coordinate response

3.1 General public and media are informed of the nature of the incident and agency decisions in accordance with enterprise guidelines.

3.2 Volunteers are coordinated and deployed according to their skills and available personal protective equipment.

3.3 Volunteers and staff are briefed on occupational health and safety hazards, preventive measures and reporting requirements.

3.4 Physical barriers are established to keep public away from animals to minimise distress to it and to protect the public.

3.5 Media is managed until authorities provide instructions.

3.6 Media is utilised according to instructions and enterprise procedures.

4. Care for affected animals

4.1 Team(s) are allotted to animals according to incident assessment, care instructions and skills within teams.

4.2 Animal first aid is applied.

4.3 Role in wildlife operations team is performed according to the command structure and procedures of the management plan.

4.4 Animal is cared for using a range of skills and according to veterinary instructions and enterprise procedures.

4.5 Occupational health and safety procedures are followed according to legislative, management plan and enterprise requirements.
5. Determine management options

5.1 Veterinary advice is sought where appropriate and according to enterprise guidelines.

5.2 Biological and incident data on animals is collected according to enterprise procedures and scientific standards.

5.3 Management options are evaluated according to advice, condition of animal, risk assessment and according to enterprise guidelines.

5.4 Where required for scientific purposes and under enterprise procedures, released animals are humanely banded or tagged.

5.5 Selected management option is implemented according to enterprise guidelines, OHS requirements and risk assessment.

5.6 Equipment and staff required for return to wild or temporary captive management are sourced to enterprise procedures.

6. Remove carcass

6.1 Where necessary, inter-agency agreement is developed with local authority for removal of carcass.

6.2 Carcass is disposed of according to authority instructions.

6.3 Equipment and staff for disposal are sourced to enterprise procedures.

6.4 OHS requirements are met.

7. Complete debrief and report

7.1 Where applicable, incident management processes for debrief and wash-up are followed.

7.2 Report provided to management according to enterprise guidelines.

KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
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<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>To public, media and management.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>On incident or emergency.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Coordinate staff and volunteers.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Caring for affected animals.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Estimating and measuring animals.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Determining and selecting management options.</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>Machinery and equipment.</td>
<td>2</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which key factors may impact on an appropriate response?

Site condition, species, species number, animal condition and weather conditions.

What natural resource emergencies may be included?

Marine animal incident management (whales and dolphins, seals and sea lions, turtles, sharks, dugongs, crocodiles, sea snakes, sea birds), oil and chemical spills, injured or dangerous animals (small animals and birds causing nuisance to the public, animals, birds and reptiles behaving aggressively or likely to behave aggressively to the public or causing public fear, either due to their normal behaviour patterns and/or injury) and animals injured by flood, fire or disease.

Which types of fauna may be relevant to this standard?

Live or dead animals, single or mass stranding, healthy, injured or diseased animals, young and adult animals, entangled animals.

From which source would Incident Management emerge?

ICS and/or enterprise procedures.

How would veterinarians be employed?

By the enterprise or contracted under enterprise procedures.

What could Intra-agency co-operation include?

Police, State Emergency Services, Marine authority.

What resources may be included?

Vessels and personnel and equipment to operate vessels, vehicles, equipment and materials for moving live animal or carcass, load shifting equipment for shifting and burying carcass, aircraft and helicopters, firearms and ammunition, OHS protective and emergency equipment including first aid kits, nets, traps, ropes, protection for animals during handling, barriers to control public, personal protective equipment and special clothing for cold and wet work, food, drink and protective equipment for personnel and lighting for night work.

What biological and incident data may be relevant to this standard?

Records of sequence of events leading to incident and resolution of incident, biological data required for research in enterprise, museums and/or universities such as physical dimensions, estimated weight and condition, veterinary information, including evidence of injury and/or disease, the taking of samples from animal and/or carcass and strict hygiene protocols (TB).
What OHS requirements may be included?

General industry and enterprise OHS procedures, vessel safety in water and around distressed animals, safety of personnel in water, vehicle safety in dunes, beaches and other coastlines, marine animal attacks, bites and scratching, transmission of disease from live or dead animals, animals rolling on or trapping personnel, use of firearms, transport, handling and use of chemicals and veterinary substances and material handling in a beach/marine environment.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in responding to wildlife emergencies requires evidence that an individual can demonstrate that they have the required knowledge and skills to respond to wildlife emergencies according to enterprise guidelines and industry best practice. The skills and knowledge required to respond to wildlife emergencies must be transferable to a range of work environments and contexts. For example, this could include different animal species, type and scope of emergencies and environments.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Animal biology and general behaviour.
- Health risks associated with animals.
- Public relations and media management.
- Incident management systems.
- State/Territory emergency procedures and networks.
- Machinery and equipment operation.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Evaluate natural resource emergency.
- Implement and coordinate response to emergency.
- Care for affected animals.
- Determine management options.
- Remove animal carcasses.
- Complete debrief and prepare reports.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3132A Survey pest animals

Unit Descriptor
This competency standard covers the process of surveying pest animal abundance by conducting ground and aerial counts. It requires the ability to identify the target pest animal and its associated behaviours, define the geographical parameters for the count, apply survey principles and techniques, and undertake accurate observations and recording. Surveying pest animals requires knowledge of pest behaviour and habitats, relevant legislative and regulatory requirements, environmental protection legislation, zoonoses and exotic diseases.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Assess the scope of the count
   1.1 Target pest animal is confirmed.
   1.2 Location of habitats and range of movement of target pest animal is confirmed.
   1.3 Item(s) of direct evidence of pest animal to be counted are determined.
   1.4 Time required to complete the survey is estimated.
   1.5 Hazards associated with the survey are identified in accordance with OHS standards.
   1.6 Environmental risks associated with the survey are identified in accordance with statutory and local authority requirements.
   1.7 Resources required to complete the survey are identified.

2. Prepare to conduct the count
   2.1 Location and boundaries for the count are mapped in accordance with the pest animal management strategy and monitoring program.
   2.2 Time and duration of the count are checked and relevant personnel notified.
   2.3 Precautions to minimise hazards associated with the count are taken in accordance with OHS standards.
   2.4 Precautions to minimise environmental risks associated with the count are taken in accordance with statutory and local authority requirements.
   2.5 Resources required to complete the count are checked for serviceability in accordance with manufacturer's specifications and relevant policies.
   2.6 Where the count involves aerial observation, precautions to minimise associated hazards are taken in accordance with industry practice.
3. Conduct count and record observations

3.1 Equipment is operated in accordance with the statutory requirements and industry practice.

3.2 Count is conducted within the boundaries of the specified location in accordance with the pest animal management strategy and monitoring program.

3.3 Precautions to minimise hazards associated with the count are implemented in accordance with OHS standards.

3.4 Precautions to minimise environmental risks associated with the count are implemented in accordance with statutory and local authority requirements.

3.5 Observations of direct evidence of target pest animal are recorded in accordance with the pest animal management strategy and monitoring program requirements.

4. Clean and store equipment and materials

4.1 Equipment and materials are cleaned and stored in accordance with relevant standards and policies.

4.2 Observation record documents are compiled and filed in accordance with relevant policies and procedures.

**KEY COMPETENCIES**

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Liaise with team members and colleagues during count activities and report activities.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Implement information gathering techniques.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Organise own work activities.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Collaborate with team during count activities.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Record and collate data.</td>
<td>3</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Determine scope of the count activities.</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>Collate data, document findings and develop the report.</td>
<td>2</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this unit of competency. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which methods for determining pest population distribution may be used?
Animal counts (including spotlight and aerial counts, faecal counts, warren, burrow, den and nest counts), and tracking pads and feeding stations.

Which relevant Federal, State legislation and local regulations may be included?
Environmental protection, pest animals, use of firearms (including licensing requirements and exemptions) humane treatment of animals, activities in nature reserves and heritage areas, poisons and veterinary substances, identification and reporting of suspected outbreaks of exotic disease, OHS regulations and common law principles relating to property, stock, duty of care and due diligence.

Which resources may be required for this standard?
Tools, equipment, materials and human resources.

What forms of documentation may be included?
Observation sheets and count summary records.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?
Competence in surveying pest animals requires evidence that a count has been safely and effectively organised and completed according to enterprise guidelines and industry best practice. The skills and knowledge required to conduct counts to measure abundance of pest animals must be transferable to a range of work environments and contexts. For example, this could include different pest animals, survey techniques and locations.

What specific knowledge is needed to achieve the performance criteria?
Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Pest behaviour and habitats.
- Relevant legislative and regulatory requirements.
- Environmental protection legislation.
- Zoonoses and exotic diseases.
What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Plan activities.
- Manage time.
- Count, add and record observations.
- Apply spotlighting techniques.
- Document and summarise observations.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3202A Construct access tracks

Unit Descriptor
This competency standard covers the process of constructing access tracks and clearing vegetation on rural land. The work reflects erosion control principles requiring the application of specialised earthmoving techniques completed to fine tolerances. Work is often carried out in varied conditions and landscapes, which requires operators to develop skills that are unique to this sector. It requires the ability to prepare for construction of access track, form access track and apply final finish to track. Constructing access tracks requires a knowledge of erosion and sediment control standards and principles, relevant legislation, erosion control and design principles, earthmoving principles, machinery operation and subsurface and surface drainage principles and systems.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare for construction of access track

   1.1 Equipment and attachments are matched to programmed tasks and terrain scheduled on site.
   1.2 Work readiness of selected equipment is verified in line with contractor policy.
   1.3 Construction details and sequence are confirmed from supervisor.
   1.4 Survey pegs and site indicators are identified and located on work site.
   1.5 Compliance with relevant regulatory planning and environmental legislation are confirmed.
   1.6 Organisational occupational health & safety procedures, practices policies, and precautions are observed and followed.
   1.7 Site environmental concerns are adhered to in accordance with relevant national, state, and local legislation and/or regulations.
   1.8 Determine control points, required grades, and water crossing points and structures from field observations and any available additional information.
   1.9 Any permits or licences required for the construction are identified, sought and obtained.
   1.10 People, materials and equipment required for the construction are coordinated and scheduled in accordance with organisation guidelines.
2. Form access track
   2.1 Industry endorsed earthworks methods and patterns for specific machines are utilised during construction.
   2.2 Optimum machine loads are monitored and maintained to suit prevailing conditions.
   2.3 Safe machine operating techniques and procedures are deployed to match terrain, site conditions and other operators or workers.
   2.4 Excavation, transport, dumping and compaction of material is completed in line with job sequence and endorsed industry practices.
   2.5 Vegetation is cleared according to enterprise guidelines and industry best practice.
   2.6 Neighbouring landholders, local authorities and interest groups are liaised with during the construction activity in according to enterprise guidelines and industry best practice.
   2.7 Documentation required by organisation and/or occupational health & safety guidelines, is completed clearly and accurately.
   2.8 Operational staff, clients and contractors are communicated with regularly throughout the construction activity to ensure smooth operation and progress.

3. Apply final finish to track
   3.1 Endorsed industry methods are utilised to surfaces to achieve job requirements.
   3.2 Site features and vegetation are retained in line with works plan/schedule.
   3.3 Site is cleared and debris removed in line with contractor policy.
KEY COMPETENCIES
What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>By discussing verbally access track construction with supervisors and others in work team.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Constructing access tracks will require basic site and construction information to be gathered and organised accordingly.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Constructing access tracks requires some planning and organising.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Constructing access tracks will require participation with others in a team.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Basic mathematical techniques relating to planning and record keeping could be applied.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>During the construction of access tracks, technical and organisational problems may arise requiring simple solutions.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Construction technology will be required to construct access tracks.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT
The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

**What equipment may be used?**

Hydraulic excavators, wheel loaders, crawler dozers, crawler loaders, motor graders and scrapers, dump trucks, backhoes, log skidders.

**Which earthworks may be included?**

Land clearing, seismic lines, access track construction and maintenance and fire breaks.

**Which site indicators may be included?**

Survey pegs, surveyor marks, cut and fill tapes and paper.

**Which contractor policies may be included?**

Safety code of practice, safety equipment, personal safety equipment, machine condition, relevant loading and working legislation, licensing, Workcover, specific site regulations, machine records, job log.
Which construction schedules may be included? Job and plan specification, sequence of works, materials specifications, materials placements, stage budgets, topsoil placement consistent with efficient re-topsoiling, retained site features, revegetation, identified environmental and erosion sensitive areas.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in constructing access tracks requires evidence that access tracks have been appropriately constructed according to enterprise guidelines, relevant legislation and industry best practice. The skills and knowledge required to construct conservation earthworks must be transferable to a range of work environments and contexts. For example, this could include different machinery, soil types and topography.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Erosion and sediment control standards and principles.
- Provisions of the relevant wild life, environmental, planning, ground water legislation.
- Safety.
- Erosion control and design principles.
- Soils and soil formation.
- Levels and levelling.
- Earthmoving principles.
- Principles for machine operation.
- Total catchment issues.
- Legal issues.
- Environmental issues.
- Country code.
- Managing peak water flows.
- Subsurface and surface drainage principles and systems.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Prepare for access track construction.
- Form access track.
- Apply final finish techniques to surfaces.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.
| Essential Assessment Information | For information about **assessing this competency standard for consistent performance** and **where and how it may be assessed**, refer to the Assessment Guidelines for this Training Package. |
RTD3205A Construct conservation earthworks

Unit Descriptor

This competency standard covers the process of constructing conservation earthworks on rural land. The work reflects erosion control principles requiring the application of specialised earthmoving techniques completed to fine tolerances. Construction is often carried out using a single earthmoving machine in varied conditions and terrains that requires the plant operator to develop skills that are unique to this sector. This competency standard requires the ability to prepare for construction, carry out planned earthworks, and apply final finish techniques. Constructing conservation earthworks requires knowledge of relevant legislation, erosion and sediment control standards and principles, erosion control and design principles, natural area protection (particularly topsoil) and rehabilitation principles, soils and soil formation, levels and levelling, earthmoving principles, machinery operation, and managing peak water flows.

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare for construction

1.1 Equipment and attachments are matched to terrain and programmed tasks scheduled on site.

1.2 Work readiness of selected equipment is verified in line with contractor policy.

1.3 Construction details and sequence are confirmed from supervisor.

1.4 Survey pegs and site indicators are identified and located on work site.

1.5 Compliance with relevant regulatory planning and environmental legislation are confirmed.

2. Carry out planned earthworks

2.1 Industry endorsed earthworks methods and patterns for specific machines are utilised during construction.

2.2 Optimum machine loads are monitored and maintained to suit prevailing conditions.

2.3 Safe machine operating techniques and procedures are deployed to match terrain, site conditions and other operators or workers.

2.4 Excavation, transport, dumping and compaction of material is completed in line with job sequence and endorsed industry practices.

3. Apply final finish techniques

3.1 Endorsed industry methods are utilised to finish batters and surfaces to achieve job requirements.

3.2 Site features and vegetation are retained in line with works plan/schedule.

3.3 Site is cleared and debris removed in line with contractor policy.

3.4 Topsoiling of disturbed areas and surfaces is completed in line with industry standards and project plans.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>By discussing verbally conservation earthworks construction with supervisors or clients.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Constructing conservation earthworks will require basic information about the site and job to be gathered and organised accordingly.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Constructing conservation earthworks requires detailed planning with client and organising of resources.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Constructing conservation earthworks may require participation with others in a team.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Basic mathematical techniques relating to planning and estimating scope of works could be applied.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>During construction of conservation earthworks, technical problems may arise requiring simple solutions.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Machinery and equipment will be required to construct conservation earthworks.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What equipment may be used?
Hydraulic excavators, wheel loaders, crawler dozers, crawler loaders, motor graders and scrapers, dump trucks, backhoes, log skidders.

Which earthworks may be included?
Earth dam construction, gully fill and shaping, waterway construction, contour bank construction, reshaping sand dunes, constructing gully sills, site preparation for flume, chute or gabion, reclamation of rangelands/scalds, constructing gully stops, constructing roadside drainage, subsurface and surface drainage systems, drain construction.
Which earthworks are not included?  Land clearing, seismic lines, access track construction and maintenance and fire breaks.

Which site indicators may be included?  Survey pegs, surveyor marks, cut and fill tapes and paper.

Which optimum machine loads may be included?  Bowl fill, blade load.

What types of dam construction may be included?  Gully embankment, hillside, excavated, ring, turkey nest, spread bank.

What types of bank construction may be included?  Graded, diversion, trainer, back push, absorption, water spreading, water ponding.

What types of waterways may be included?  Natural grass, grassed waterway banked, grassed waterway excavated.

Which contractor policies may be included?  Safety code of practice, safety equipment, personal safety equipment, machine condition, relevant loading and working legislation, licensing, Workcover, specific site regulations, machine records, job log.

Which additional materials may be included?  Pipes, concrete, steel reinforcement, ameliorants, plastic lining.

Which construction schedules may be included?  Job and plan specification, sequence of works, materials specifications, materials placements, stage budgets, topsoil placement consistent with efficient re-topsoiling, retained site features, revegetation, identified environmental and erosion sensitive areas.
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in constructing conservation earthworks requires evidence that earthworks have been appropriately constructed according to enterprise guidelines, relevant legislation and industry best practice. The skills and knowledge required to construct conservation earthworks must be transferable to a range of work environments and contexts. For example, this could include different earthwork structures, soil types and topography.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Clean Water Act.
- Erosion and sediment control standards and principles.
- Provisions of the relevant wild life, environmental, planning, groundwater Acts.
- Erosion control and design principles.
- Natural area protection (particularly topsoil) and rehabilitation principles.
- Soils and soil formation.
- Levels and levelling.
- Earthmoving principles.
- Principles for machine operation.
- Total catchment issues.
- Legal issues.
- Environmental issues.
- Country code.
- Managing peak water flows.
- Subsurface and surface drainage principles and systems.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Prepare for construction.
- Carry out planned earthworks.
- Effect minimal damage to natural areas.
- Apply final finish techniques.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3212A Implement erosion and sediment control measures

Unit Descriptor
This competency standard covers the process of the construction/installation and maintenance of a range of measures specified on erosion and sediment control plans, and complies with the requirements often associated across a broad range of land disturbance and restoration projects. It requires the ability to prepare for implementation and construction, carry out implementation and construction works, and carry out repairs and maintenance procedures. Implementing erosion and sediment control measures requires knowledge of materials cartage, pollution control, sequence of working and timing, occupational health and safety issues relating to the site, equipment used, construction techniques and specifications and standards.

Unit Sector No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare for implementation and construction

   1.1 Erosion and sediment control plan and schedule of works match site conditions.

   1.2 Survey pegs and site indicators are identified on site.

   1.3 Equipment and tools are matched to program works and terrain on site.

   1.4 Work readiness of selected equipment and tools are verified in line with contractor policy.

   1.5 Materials are selected to complete proposed works in line with construction schedule.

2. Carry out implementation and construction

   2.1 Earthworks are constructed in accordance with details specified in the plan and to industry standards.

   2.2 Erosion and sediment control products and materials are installed in accordance with manufacturers recommendation and industry guidelines and plans.

3. Carry out repairs and maintenance procedures

   3.1 Site works maintenance inspection schedule is applied to reinstate operating effectiveness of erosion and sediment control measures on site.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>By discussing verbally or in writing erosion and sediment control measures with supervisors and others.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Implementing erosion and sediment control measures will require basic site information to be gathered and organised accordingly.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Implementing erosion and sediment control measures requires some planning and organising.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Implementing erosion and sediment control measures will require coordination of self and others in a team.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Basic mathematical techniques relating to sequencing of working and timing/duration could be applied.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>During erosion and sediment control, implementation technical and organisational problems may arise requiring simple solutions.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Erosion control technology will be required.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which industry sectors may be included? Local government, urban, civil construction, forestry, extractive industry, rural, natural resource management.

Which industry sector people may be included? Earthmoving machine operators, timber harvest machine operators, labourers, cartage contractors, fuel suppliers, product suppliers, landholders, trade personnel, fitters, engineers, project supervisors, landcare group members, surveyors, contractor support staff, forest supervisors and foresters.
Which types of control measures may be included?

Site management, land shaping, batter stabilisation, banks and channels, level spreader, revegetation, waterways, check dams, bank and channel linings, grade stabilising structures, outlet protection structures, stormwater detention measures, dust control, rural road & track crossbank and crossfall (e.g., infall, outfall, crown, drainage).

Which types of sediment control measures may be included?

Sediment basins, sediment traps, sediment filters, excavated sediment traps, straw bale, stormwater inlet sediment traps, sediment fence, straw bale, geotextile fabric and vegetation strips.

What methods of implementation may be included?

Construction, installation, maintenance.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in implementing erosion and sediment control measures requires evidence that erosion and sediment control measures have been satisfactory constructed or installed according to enterprise guidelines and industry best practice. The skills and knowledge required to implement erosion and sediment control measures must be transferable to a range of work environments and contexts.

For example, this could include different measures, machinery and soil types.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Materials cartage pollution control.
- Sequence of working and timing/duration.
- Occupational health & safety issues relating to the site.
- Equipment used.
- Construct, install and maintain includes materials, quantity and where to source them on site.
- Construction/installation techniques for all measures on the plan.
- Limitations of structures including timing of maintenance, structure life cycle, specifications and standards.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Prepare for implementation and construction.
- Carry out implementation and construction.
- Carry out repairs and maintenance procedures.
Are there other competency standards that could be assessed with this one? This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3315A Transport machinery

Unit Descriptor
This competency standard covers the process of safe movement, loading and securing of machinery for the purpose of transport. It requires the ability to load and unload machines and safely travel machines. Transporting machinery requires knowledge of the provisions, requirements and legislation pertaining to heavy transport, road safety, principles for machine operation and tying down procedures for large machinery.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Load machines
1.1 Trailer or float is prepared for loading according to contractor policy.
1.2 Machine is loaded in compliance with safe working practices.
1.3 Tying down procedures are completed in line with recognised industry standards.
1.4 Machine is secured to prevent movement in transport according to industry practice.
1.5 Legal requirements for signs indicating oversized loads are met.
1.6 Permits, clearances and escorts for transporting oversized loads are arranged.

2. Transport machines
2.1 Machines are driven on or off road in compliance with relevant legislation.
2.2 Machinery is loaded and driven safely to destination in compliance with relevant legislation.
2.3 Selected transport route for oversized loads complies with permits, clearances and relevant legislation.
2.4 Machines are unloaded safely in line with accepted workplace policy.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>By discussing verbally transport requirements of earthmoving machinery with supervisors.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Transporting earthmoving machinery will require basic logistical information to be gathered and organised accordingly.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Transporting earthmoving machinery requires some routine planning and organising.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Transporting earthmoving machinery may require participation with others in a team.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Basic mathematical techniques may be applied.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>While transporting earthmoving machinery, technical problems may arise requiring simple solutions.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Transport technology will be used.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

**What machinery is covered by this standard?**

Large machinery such as that used for earthmoving or agricultural operations.

**By what means may machines be transported?**

Floated or driven between sites.

**How may machines be loaded?**

Side loaded, rear loaded.

**What items may legislation for moving machinery specify?**

Warning lights, flags, warning signs, notifying relevant authorities, escort vehicles, traffic control, permits, travel restrictions, loadings.
Which contractor policies may be included?

Required licensing, loading, safety issues, machine and vehicle operator guidelines, equipment usage, storage and handling, site protocols, consideration of client needs and requirements, personal presentation standards, storage and transfer of fuels and chemicals, machine and equipment operation requirements.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in transporting earthmoving machinery requires evidence that earthmoving machinery has been successfully transported according to enterprise guidelines, relevant legislation and industry best practice. The skills and knowledge required to transport earthmoving machinery must be transferable to a range of work environments and contexts. For example, this could include different machinery, road conditions and legislative requirements.

Note that prescribed driving licences are mandatory for completion of this unit.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- The provisions, requirements and legislation pertaining to heavy transport.
- Safety.
- Principles for machine operation.
- Tying down procedures for large machinery.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Load and unload earthmoving machines.
- Travel earthmoving machines.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
Monitor and evaluate the local pest management action plan

This competency standard covers the process of monitoring and evaluating the local area pest management action plan. Work is likely to be under limited supervision with checking related to overall progress. Responsibility for the work of others may be involved. Competencies are normally used within routines, methods and procedures where some discretion is required in the selection of equipment, work organisation, services, actions and achieving outcomes within time constraints.

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Collate all available data
   1.1 Data on pests’ abundance are collated.
   1.2 Date on economic impacts of pests are collated.
   1.3 Data on environmental impacts of pests are collated.
   1.4 Data on pest management action plan operating costs are collated.

2. Assess data against objectives and performance criteria
   2.1 Actual results are compared with objectives and performance criteria for the action plan.
   2.2 Actual costs are compared with budget for the strategy.
   2.3 Cost and benefits of the action plan are documented.

3. Compile report of strategy evaluation
   3.1 Report is compiled following enterprise procedures.
   3.2 Indicators of good performance of the action plan are isolated and discussed.
   3.3 Causes of poor performance are examined.
   3.4 Conclusions about the pest management action plan in relation to changes in pest abundance and impacts are clearly stated.
   3.5 Conclusions are supported by the data.

4. Recommend modifications
   4.1 Recommendations to modify or eliminate causes of poor performance, or to enhance current performance are made.
   4.2 Recommendations provided to supervisor or other authority in format that complies with enterprise guidelines.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Establishing and maintaining consultation and liaison processes with land users and stakeholders.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Analysing pest management data.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Organising pest management activities.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Building and maintaining working relationships with local land users.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Collating and determining significance of data.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Analysing pest management data.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Collating data and documenting planning activities.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which land uses may be relevant?

Local agricultural production, local forestry industry, local nature and wildlife reserves, local heritage areas and local recreation areas.

What are the relevant Federal, State legislation and local regulations, which may apply to this standard?

Environmental protection, vertebrate pests, use of firearms (including licensing requirements and exemptions) humane treatment of animals, activities in nature reserves and heritage areas, poisons and veterinary substances, identification and reporting of suspected outbreaks of exotic disease, OHS regulations and common law principles relating to property, stock, duty of care and due diligence.

What forms of land value may be relevant?

Economic and environmental value.
<table>
<thead>
<tr>
<th><strong>Who might other stakeholders be?</strong></th>
<th>Land managers in the region, recreational land users, regional land management bodies, local regulatory authorities and landcare committees.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Which measures of potential or actual impact may be included in the management units?</strong></td>
<td>Biological values, agricultural values, environmental values, recreational and social values and public health values.</td>
</tr>
<tr>
<td><strong>Which pests may be relevant to this standard?</strong></td>
<td>Animals scheduled as <em>vertebrate pests</em> and plants scheduled as <em>pest plants</em>.</td>
</tr>
<tr>
<td><strong>Which methods for determining vertebrate pest population distribution may be used?</strong></td>
<td>Animal counts (including spotlight and aerial counts, faecal counts, warren, burrow, den and nest counts), and tracking pads and feeding stations.</td>
</tr>
<tr>
<td><strong>Which management units may be included?</strong></td>
<td>Measures of potential or actual impact on biological values, agricultural values, environmental values, recreational and social values and public health values.</td>
</tr>
<tr>
<td><strong>What management options may be included?</strong></td>
<td>Commercial management, crisis management, no management, local eradication and strategic management (sustained, targeted and one-off).</td>
</tr>
<tr>
<td><strong>What methods and techniques for controlling the weed problem may be used?</strong></td>
<td>Changing land management or production processes and practices (e.g., changing lambing times, changing sowing times and changing crops), modifying habitat, pasture management, weed control (poisoning, biological controls).</td>
</tr>
<tr>
<td><strong>What methods and techniques for controlling animal pest problems may be used?</strong></td>
<td>Changing land management or production processes and practices (e.g., changing lambing times, changing sowing times and changing crops), modifying habitat, pasture management and pest population control (shooting, poisoning, trapping, mustering, relocation, fumigation, sedation, exclusion fencing, biological controls, harvesting and tagging).</td>
</tr>
<tr>
<td><strong>What sorts of damage and loss caused by pests may be relevant to this standard?</strong></td>
<td>Loss of pasture, loss of livestock, loss of native fauna, loss of recreational and social amenity, increased incidence of disease vectors, reduced tourism, loss of crops, damage to fences, loss of recreational and social amenity, loss of native flora, soil disturbance and erosion, reduction in water quality and pollution.</td>
</tr>
</tbody>
</table>
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in monitoring and evaluating the local pest management action plan requires evidence that appropriate sources of information have been checked, analysis of the positive and negative indicators of the action plan has been determined and recommendations for modifications to local action plans have been documented in a summary report. The skills and knowledge required to monitor the local weed management strategy must be transferable to a range of work environments and contexts. For example, this could include different pest species, report formats, action plans and local areas.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Local land management process.
- Local production process.
- Relevant legislative and regulatory requirements.
- Environmental protection legislation.
- Weed control methods and techniques.
- Social and environmental issues.
- Statutory requirements for weed control.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Collate available data.
- Estimate costs and advantages.
- Communicate, negotiate and liaise with other statutory authorities, agencies and stakeholders.
- Assess data against objectives and performance criteria.
- Compile report of strategy evaluation.
- Recommend modifications to local action plans.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3501A Assist in the implementation of legislation

Unit Descriptor
This competency standard covers the process of assisting the implementation of pest control legislation and involves the provision of both support and advice to landholders to ensure their compliance. It requires the ability to identify, investigate and act on non-compliance issues. Assisting in the implementation of legislation requires knowledge of relevant legislation and regulations, weeds occurring in the locality and appropriate control options, communication techniques, conflict avoidance, negotiation techniques and resolution and individual and property rights.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Identify non-compliance with legislation
   1.1 Non-compliance is identified through complaint or other means, and recorded in accordance with legislative and enterprise requirements.
   1.2 Senior staff are notified in accordance with legislative and enterprise requirements.

2. Investigate non-compliance
   2.1 Land ownership is established and responsibilities of all parties are established in line with State legislation.
   2.2 Further information is obtained on possible non-compliance with legislation.
   2.3 Landowner is contacted and notified of infestation and control requirements in compliance with enterprise guidelines and supervisors instructions.
   2.4 Policies of right of entry are adhered to in communicating with landowners.
   2.5 Accurate records are maintained in line with agency policies.

3. Act on non-compliance issues
   3.1 Relevant notices are issued in accordance with relevant legislation and regulations, enterprise guidelines and supervisors instructions.
   3.2 Evidence is collected and findings are reported in accordance with enterprise guidelines or following supervisors instructions.
   3.3 Pest management advice is provided to the landholder consistent with enterprise guidelines and legislative requirements.
   3.4 Support is provided to landholders in the implementation of pest management programs in accordance with enterprise policy.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<th>Example of Application</th>
<th>Performance Level</th>
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</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Verbal and written communications with landholders, and supervisors and authorities.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Written, photographic, and reference to public documents.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>According to enterprise and legislative procedures and protocols.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Through communication and sharing of information, and field support.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Determining size and scope of pest infestations and required work to comply with legislation.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Through exploration of a range of options to resolve non-compliance issues.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Recording, transmittal and storage of information.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which relevant legislation may be included?  

What pests are relevant to this competency standard?  
Weeds and vertebrate pests.

What pest management advice may be relevant to this standard?  
Providing an interpretation of legislative requirements or reference to appropriate sources of advice where required.

What can other means include?  
Observation or reports from a secondary source.
### What may agency policies specify?

Accurate record keeping, observation procedures, inspection procedures, procedures or protocols for entry onto private property, storage protocols, protocols for preparation and serving of notices.

### EVIDENCE GUIDE

**What evidence is required to demonstrate competence for this standard as a whole?**

Competence in assisting in the implementation of legislation requires evidence that non-compliance against legislation is identified and investigated and that appropriate action is carried out to resolve the situation. The skills and knowledge required to assist in the implementation of legislation must be transferable to a range of work environments and contexts. For example, this could include different types of pests, properties, legislation and investigative techniques.

### What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Relevant legislation and regulations.
- Pests occurring in the locality and appropriate control options.
- Communication techniques.
- Conflict avoidance and resolution.
- Individual and property rights.
- Negotiation techniques.

### What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Identify non-compliance with legislation.
- Investigate non-compliance.
- Act on non-compliance issues.
- Communicate effectively with landowners and field staff.
- Provide considered advice in a manner that minimises conflict and maximises compliance.
- Accurately observe and report.
- Accurately document activities.

### Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

### Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3502A Carry out inspection of designated area

Unit Descriptor
This competency standard covers the process of inspection of designated areas for specific purposes. It requires the ability to define area and target of inspection, carry out risk assessment and minimisation, prepare for and carry out inspection, and clean and store equipment and materials following inspection. Inspecting designated areas requires knowledge of recognition and biological classification, risk management, inspection procedures and techniques, monitoring techniques and reporting protocols.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Define area and target of inspection
   1.1 Location and size of area to be inspected identified consistent with management strategy and/or supervisors instructions.
   1.2 Frequency of inspection set according to management strategy.
   1.3 Targets of inspection determined from Management Strategy.
   1.4 Characteristics and favoured conditions for targets confirmed with management.

2. Carry out Risk Assessment and minimisation
   2.1 Time and duration of inspection checked and relevant personnel notified.
   2.2 Risks to the environment associated with the inspection are identified in accordance with statutory and local authority requirements.
   2.3 Precautions to minimise environmental risks associated with the inspection are taken in line with statutory and local authority standards.
   2.4 Hazards associated with the inspection are identified in accordance with OHS standards.
   2.5 Precautions to minimise hazards are taken in accordance with OHS standards.

3. Prepare for inspection
   3.1 Vehicles, equipment and materials required for the inspection are identified.
   3.2 Vehicles, equipment and materials are checked for serviceability following manufacturers guidelines.
### 4. Carry out inspection

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Vehicles are operated and driven within statutory requirements and industry practice.</td>
</tr>
<tr>
<td>4.2</td>
<td>Inspection is carried out within the specified area and following the requirements of the integrated pest management strategy.</td>
</tr>
<tr>
<td>4.3</td>
<td>Target occurrence is identified and recorded as required by the management strategy and enterprise practice.</td>
</tr>
<tr>
<td>4.4</td>
<td>Statutory requirements and enterprise protocols regarding entering private property are fulfilled where appropriate.</td>
</tr>
<tr>
<td>4.5</td>
<td>Dealings with landholders or their employees follow regulatory requirements and enterprise procedures.</td>
</tr>
<tr>
<td>4.6</td>
<td>Precautions to minimise risks to the environment are implemented in accordance with statutory and local authority requirements.</td>
</tr>
<tr>
<td>4.7</td>
<td>Precautions to minimise hazards are implemented in accordance with OHS standards.</td>
</tr>
<tr>
<td>4.8</td>
<td>Incursions of non-targeted threats are noted and reported on.</td>
</tr>
</tbody>
</table>

### 5. Establish the impact of the specified target

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>Information on potential impacts is collected from stakeholders.</td>
</tr>
<tr>
<td>5.2</td>
<td>Data on environmental hazards resulting from target presence are collected and analysed from stakeholders or available information.</td>
</tr>
</tbody>
</table>

### 6. Prepare a report

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1</td>
<td>Collated data, inspection records and analysis of findings are documented with appropriate recommendations in accordance with enterprise guidelines.</td>
</tr>
<tr>
<td>6.2</td>
<td>Targets reported as required by legislation, regulation or enterprise guidelines.</td>
</tr>
<tr>
<td>6.3</td>
<td>Report submitted to supervisor or other authority.</td>
</tr>
<tr>
<td>6.4</td>
<td><strong>Samples</strong> submitted in compliance with legislative requirements, regulations or enterprise guidelines.</td>
</tr>
<tr>
<td>6.5</td>
<td>Equipment and materials are cleaned and stored following industry standards or enterprise practice.</td>
</tr>
</tbody>
</table>
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Through reporting to management and work team.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Through completion of field notes, photographic records and samples.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>According to procedures and policies set out in management plan.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>In agreeing with respective work roles of staff involved in carrying out inspections.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Counting and calculations relating to presence of target in designated areas.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Identifying and locating presence and distribution of targets.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Communicating with others, monitoring results and keeping records.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which designated areas may be included? Farms, parks, reserves, roadsides or other discrete areas as directed.

Which targets may be included? Plant and animal species and communities, threatened or endangered species, notifiable or noxious pests or animals, any species not previously identified in the region, weeds or animals which may present a high risk, fire risks and threats, and other targets requiring inspection for research or management purposes.

What types of targets may be relevant to this standard? Those occurring in crops, pastures, rangelands, natural areas, aquatic and environmental pests.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are guides and what form do they take?</td>
<td>Various printed forms or electronic databases. They may include drawings and/or photographs in colour or black and white, or a dichotomous key.</td>
</tr>
<tr>
<td>What regional variations may be included?</td>
<td>Coastal, arid, semi-arid, tropical and alpine regions.</td>
</tr>
<tr>
<td>Which land uses may be included?</td>
<td>Intensive or broad acre cropping, native or improved pastures, and conservation or regeneration areas.</td>
</tr>
<tr>
<td>Which land values may be included?</td>
<td>Economic, biological values, agricultural values, environmental values, recreational and social values and public health values.</td>
</tr>
<tr>
<td>To whom might samples be submitted for positive identification?</td>
<td>Relevant authorities or other organisations with relevant expertise in identification.</td>
</tr>
<tr>
<td>Which relevant legislation may apply to this standard?</td>
<td>Acts and regulations relating to environmental protection, legislation and regulations relating to noxious weeds, native vegetation and wildlife, vertebrate pests, OHS regulations, common law requirements relating to property, stock, duty of care and due diligence.</td>
</tr>
<tr>
<td>What forms may documentation take?</td>
<td>Observation sheets and count records, recorded on paper or electronically.</td>
</tr>
<tr>
<td>What may be included as resources?</td>
<td>Tools, equipment, materials and human resources.</td>
</tr>
<tr>
<td>What types of samples are relevant to this competency standard?</td>
<td>Specimens of plants or animals, photographic records, evidence or examples of plant or animal presence or impact on area.</td>
</tr>
<tr>
<td>How might supporting and validating data be obtained?</td>
<td>By direct observation, GIS, satellite information and air-flown MSS.</td>
</tr>
</tbody>
</table>
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in carrying out inspections of designated areas requires evidence that an area has been inspected for targets, appropriate records and reports are completed and that materials and equipment are properly cleaned and stored. The skills and knowledge required to carrying out inspections of designated areas must be transferable to a range of work environments and contexts. For example, this could include different inspection targets, recording systems, and designated areas.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Recognition and classification of local plant and animal species.
- Use of simple taxonomic or identification keys.
- Characteristics of inspection targets.
- Inspection procedures and techniques.
- Monitoring techniques.
- Reporting protocols.
- Map reading.
- Relevant land use processes.
- Relevant legislative and regulatory requirements including environmental protection legislation.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Define area and target of inspection.
- Carry out Risk Assessment and minimisation.

- Prepare for inspection.
- Carry out inspection.
- Identify targets and level of impact on site.
- Implement control measures.
- Monitor control methods.
- Record spatial and temporal information.
- Clean and store equipment and materials following inspection.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
Maintain natural areas

This competency standard covers the process of maintaining places of natural significance. It requires the ability to plan maintenance works, undertake maintenance, and report completion of activities. Maintaining natural areas requires a knowledge of ecology, plant and animal species, relevant legislation, natural and human threats to places of natural significance, pollution sources and damage potential, legislation under which enterprise operates, enterprise procedures for reporting maintenance works, and selection and application of protective structures, devices and signs.

Note: For Indigenous contexts, the delivery and assessment against this competency standard must comply with community protocols and guidelines and be supported by elders and custodians of country.

ELEMENT PERFORMANCE CRITERIA

1. Plan maintenance works
   1.1 Movement through place is planned to minimise disturbance and degradation.
   1.2 Legislative requirements, Codes of Practice and the relevant management strategy and plan are identified.
   1.3 Equipment, machinery and materials for maintenance works are determined and obtained.
   1.4 Where required, stakeholders are consulted about pending maintenance works.

2. Undertake maintenance
   2.1 Activity maintenance works conform to relevant risk control measures and practices, and are in accordance with enterprise guidelines.
   2.2 Interim protective measures are taken to avoid degradation and disturbance during maintenance works.
   2.3 Activities of personnel and visitors are monitored to reduce risks to the significance of the place.

3. Report completion of activities
   3.1 Site is made good on completion of works.
   3.2 Equipment and machinery is cleaned and stored according to enterprise guidelines.
   3.3 Excess materials are removed from site and stored or disposed of according to enterprise guidelines.
   3.4 Completed maintenance works are reported to supervisors to enterprise and legislative requirements and best practice guidelines and Codes of Practice.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Reports to management.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>According to enterprise policy and procedures.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Equipment and materials.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Maintenance works.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Timing and costing associated with maintenance works.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Analysing threats to place.</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>Equipment and machinery.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What aspects of natural significance may be relevant to this standard?

Species diversity, ecosystem diversity and community diversity, rarity of species and uniqueness of related ecosystems, geological diversity including land forms, degree to which geological features and land forms are significant, potential natural integrity, impact of any degradation and/or disturbance, potential interrelationship with cultural values including Indigenous and other values, organisation policy and practice, aesthetic dimensions, interface/integration with productive lands, water catchments, river systems, urban areas, coastal and marine environments and presence of minerals.

Which stakeholders may be included?

The enterprise management, a government agency, private organisations, enterprises or individuals, visitors to the park/reserve, community groups involved in environmental matters including any 'friends of the park', local population and general public, business operating in park such as tour operators, concessionaires and accommodation operators.
| To which people do risk control measures apply? | Visitors to a place or area for natural and/or cultural tourism purposes, tour guides from other enterprises, bus drivers, aircraft and vessel crew, contractors, scientific researchers, campers, hikers, friends of park/reserve committees and other voluntary agencies, cultural groups, nearby landholders, and Indigenous peoples. |
| What protective measures may be included? | Exclusion from dangerous and/or sensitive areas, protection of flora, fauna, topsoil and other features by physical barriers and/or administrative controls, escorting visitors, construction of works and protective barriers, visitor education, briefing of contractors and others on risks and administrative control procedures and measures. |

**EVIDENCE GUIDE**

What evidence is required to demonstrate competence for this standard as a whole?

Competence in maintaining natural areas requires evidence that maintenance works have been planned and carried out in places of natural significance according to enterprise guidelines and industry best practice. The skills and knowledge required to maintain natural areas must be transferable to a range of work environments and contexts. For example, this could include different environments, sites of natural significance, and maintenance activities.

**What specific knowledge is needed to achieve the performance criteria?**

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Ecology in land based, coastal zones and/or marine parks.
- Marine, shore and land based species.
- Applicable State/Territory and Commonwealth legislation covering parks, conservation, environmental protection and heritage.
- Natural and human threats to places of natural significance.
- Pollution sources and damage potential.
- Basic protection/rehabilitation methods.
- Legislation under which enterprise operates.
- Enterprise procedures for reporting maintenance works.
- Selection and application of protective structures, devices and signs.

**What specific skills are needed to achieve the performance criteria?**

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Plan maintenance works to achieve minimal deleterious impacts.
- Undertake maintenance with minimal deleterious impacts.
- Report completion of activities.
<table>
<thead>
<tr>
<th>Are there other competency standards that could be assessed with this one?</th>
<th>This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential Assessment Information</td>
<td>For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.</td>
</tr>
</tbody>
</table>
RTD3507A Undertake sampling and testing of water

Unit Descriptor

This competency standard covers the process of sampling and testing water quality as part of a monitoring program. It requires the ability to plan for sampling and testing, prepare equipment and resources, carry out sampling and testing and complete water sampling and testing activities. Sampling and testing water quality requires knowledge of monitoring schedules, hydrological cycle, water quality determinations and standards, principles of water quality control, sampling and testing methods and groundwater salinity.

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Plan for sampling and testing field work
   1.1 Monitoring schedule is read/heard and confirmed with manager.
   1.2 Advanced water quality and environmental parameters are identified.
   1.3 Samples to be collected to determine water quality and environmental parameters are identified by supervisory staff.
   1.4 Equipment requirements for water sampling and testing are determined and arranged.
   1.5 Range of likely operating conditions, hazards and difficult/sensitive environments are assessed for impact on sampling and testing.

2. Prepare equipment and resources
   2.1 Equipment required for sampling and testing is sourced according to monitoring procedures.
   2.2 Equipment is checked for availability and serviceability in accordance with enterprise procedures.
   2.3 Testing and correlation is carried out to verify correct and accurate performance of equipment.
   2.4 Repairs and maintenance of field-based equipment and instruments are carried out in accordance with enterprise procedures and manufacturer's instructions.
   2.5 Data or record sheets/books are collected for use.
   2.6 Equipment, data sheets and personnel are moved to sampling sites without injury or damage and readied for use.
   2.7 Equipment is installed and protected according to manufacturer's specifications, safety and enterprise requirements.
   2.8 Staff undertaking sampling and testing are briefed on and are aware of responsibilities in accordance with monitoring schedule.
   2.9 Testing equipment is confirmed and serviceable for monitoring procedures in field conditions to enterprise and manufacturers' requirements.
3. Carry out sampling and testing of water

3.1 Tests are undertaken in accordance with monitoring plan and enterprise procedures to avoid erroneous readings.

3.2 Samples are taken and tested in accordance with monitoring standards and guidelines.

3.3 Samples for external analysis are prepared, packaged and sent to laboratory in accordance with monitoring schedule and laboratory standards.

3.4 Specific and general observations including information on relevant ambient and antecedent environmental conditions are made in accordance with monitoring schedule.

3.5 Personnel undertaking sampling and testing tasks are supervised and feedback given on work performance.

3.6 Equipment operation and work practices conform to OHS requirements.

4. Complete water sampling and testing activities

4.1 Equipment and clothing is cleaned, sanitised, repaired and stored in accordance with enterprise procedures.

4.2 Damaged or malfunctioning equipment is repaired on site or sent to manufacturer or specialist.

4.3 Test results and observations are accurately recorded on data sheets and forwarded in accordance with enterprise procedures.

4.4 Changes in field conditions and equipment are conveyed to supervisor according to enterprise procedures.

KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Recording and reporting on sampling and testing activities.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Through completion of record sheets, taking of samples for external analysis and recording of observations.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Using appropriate equipment and in accordance with enterprise guidelines.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Co-operation in sampling and testing activities.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Through evaluation of sampling and testing results and reporting to supervisor.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Assessing threats and changes to area being monitored.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Use of field equipment and machinery.</td>
<td>2</td>
</tr>
</tbody>
</table>
### RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

<table>
<thead>
<tr>
<th>What advance water quality parameters may be relevant to this competency standard?</th>
<th>Dissolved or suspended solids, nitrogenous products (TKN, TAN, NO\textsubscript{2}-, NO\textsubscript{3}-), redox, ozone, soil pH, clay content of soil, contaminants (including pesticides, herbicides, heavy metals), biological oxygen demand, bacterial levels (\textit{E. coli} and faecal coliforms), aquatic life, chlorophyll, phosphorus (total and orthophosphate), macro-invertebrates and macrophytes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which environmental parameters may be included?</td>
<td>Changes in native land-based and/or aquatic life around the site, sediment and debris levels, wastes and contaminants, toxic microalgae and presence of severe weather conditions.</td>
</tr>
<tr>
<td>What water quality and environmental parameters may be relevant to this standard?</td>
<td>Dissolved oxygen, hardness, ammonia, nitrite, nitrate, carbon dioxide, alkalinity, temperature, salinity, pH and turbidity.</td>
</tr>
<tr>
<td>What equipment may be included?</td>
<td>Electronic machines, probes, grabs, nets, dredges, plankton nets, water sample bottles, fox whistle, bailer, still and video cameras, specialised machinery, micropipettes, soil analysis kits, and refractometer.</td>
</tr>
<tr>
<td>What repairs and maintenance may apply to field-based equipment?</td>
<td>Adjustment of probes or other settings for calibration, correlation and replacement of electronic parts, covers, probes.</td>
</tr>
<tr>
<td>How can erroneous readings be avoided?</td>
<td>By following monitoring schedule and standards, through regular readings (e.g., at the same time each month), by taking readings before irrigation cycles commence, by bailing out before taking the reading (especially where salinity levels are being assessed).</td>
</tr>
<tr>
<td>What types of samples may be included?</td>
<td>Water, weather station/meteorological data, sediments or soils, pests, predators or fouling organisms and vegetation (land and aquatic).</td>
</tr>
<tr>
<td>What samples for external analysis may be relevant?</td>
<td>Contaminants (such as heavy metals, pesticides, herbicides and other chemicals), proximate analysis of culture or other organisms, trace elements, mineral content of waters/soils and pathology.</td>
</tr>
<tr>
<td>What is meant by antecedent environmental conditions?</td>
<td>Previously relevant weather, rainfall, irrigation, tides or floods that could influence sample/test results.</td>
</tr>
<tr>
<td>Which OHS requirements may be included?</td>
<td>Codes of Practice, regulations and/or guidance notes which may apply in a jurisdiction, and enterprise-specific OHS procedures, policies or standards.</td>
</tr>
</tbody>
</table>
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in sampling and testing water quality requires evidence that water quality has been appropriately sampled and tested for a given site according to prescribed scientific procedures, standards and principles, monitoring schedules and industry best practice. The skills and knowledge required to sample and test for water quality must be transferable to a range of work environments and contexts. For example, this could include different locations, environments and monitoring schedules.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Hydrological cycle.
- Water monitoring schedules and guidelines.
- Standards for water quality.
- Sampling and testing methods.
- Groundwater contamination evaluation.
- Sources of groundwater contamination.
- Groundwater salinity - mechanisms, occurrence and management.
- Irrigation induced salinity, mechanisms and management.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Plan for sampling and testing.
- Prepare equipment and resources.
- Carry out sampling and testing.
- Complete water sampling and testing activities.
- Record and input data into various data entry systems.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3508A Perform diving for scientific purposes

Unit Descriptor
This competency standard covers the process of scientific diving required to support research, monitoring and inspection roles associated with places or areas of significance. It requires the ability to plan diving operations, prepare for and conduct dive, debrief diving team, check and store equipment, review diving program and respond to diving maladies. Performing diving for scientific purposes requires knowledge of the physics of diving, no-decompression tables, dive equipment and planning, emergency procedures, agency standing orders for notification, and radio operation procedures. Successful completion of this unit requires compliance with the current Australian Standard for Occupational Diving Operations: Scientific Diving.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Plan diving operations
   1.1 Objectives of dive are determined to enterprise guidelines, to diving standards and occupational health and safety guidelines.
   1.2 Number and type of dives to complete objectives are assessed to develop a dive program.
   1.3 Equipment and personnel required for dive operations are determined.
   1.4 Appropriate people are consulted about the dive objectives and proposed program.

2. Prepare for diving operations
   2.1 Equipment and personnel required for dive operations are obtained.
   2.2 Appropriate notification and consents for dive plans are given and obtained.
   2.3 Equipment condition is checked to legislative, manufacturers’, enterprise and code of practice requirements.
   2.4 Faulty equipment is sent for repair or discarded.
   2.5 Consumables requirements are assessed and sourced.
   2.6 Personnel are checked for competence and possession of a current medical clearance.
   2.7 Safety and emergency procedures for the dive program are developed to enterprise requirements and codes of practice.
3. Conduct dive

3.1 Personnel and equipment are transported safely to dive site.

3.2 Communications procedures are established for dives in remote areas.

3.3 Pre-dive checks are performed to enterprise requirements and codes of practice.

3.4 Final assessment on environmental factors is completed before entering the water.

3.5 Dives are completed to procedures, safe working practices, defined objectives, enterprise requirements, codes of practice, legislation.

3.6 Dives are conducted within the parameters of the special dive plan, including entry, descent, working on dive objective and exit.

3.7 Dive procedures are amended within enterprise requirements, codes of practice and personal authority in light of dive conditions, and any changes to dive objectives.

3.8 Dives are suspended or cancelled where safety or equipment operation considerations warrant.

3.9 Dives are completed to objectives or suspended where personnel have completed allowed number of dives.

3.10 Equipment is removed from site at completion of dives.

3.11 Dives are logged to enterprise and legislative requirements and codes of practice.

4. Debrief diving team

4.1 Procedures applied during dive and outcomes of dive are reviewed by dive team promptly after dive.

4.2 Procedures and dive plans are amended to enterprise requirements or codes of practice to reduce dive risks including safety and diver health, and improve dive efficiency and effectiveness.

4.3 Dive debriefing is recorded to enterprise and legislative requirements and codes of practice.

5. Check and store equipment

5.1 Dive equipment is checked for condition and operation to manufacturers instructions, enterprise requirements and codes of practice.

5.2 Faulty equipment is sent for repair or discarded to enterprise requirements.

5.3 Equipment is stored to manufacturers' and enterprise requirements.

5.4 Equipment use is recorded to enterprise, manufacturers' and legislative requirements.

5.5 All equipment is tested according to statutory requirements.

6. Review diving program

6.1 Dive plan is reviewed in light of debriefing, outcomes achieved, risk assessments and safety analysis, and future requirements.

6.2 Review conclusions are recorded and reported to enterprise requirements.
7. Respond to diving incidents

7.1 Dive operations are continually monitored to identify potential or actual maladies.
7.2 Dive operations are suspended or cancelled where potential or actual maladies have been identified.
7.3 A rescue approach is developed where required to enterprise requirements, or codes of practice.
7.4 Diver first aid is applied to injured or distressed personnel.
7.5 Emergency authorities are notified where assistance is required.
7.6 Procedures and dive plan are reviewed in light of risks identified and potential or actual malady.
7.7 All incidents are recorded on the enterprise/agency register.

KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Debriefing and reviewing dives.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Diving conditions.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Equipment and safety requirements for dive.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>During the dive.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Setting equipment.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Dealing with maladies.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Dive equipment.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which diving operations are excluded from this unit?

Construction, repair, maintenance, survey or demolition of any building, structure, shaft, tunnel, boat, ship, slipway, mooring or breakwater, or dredging, or the placing, laying, inspection or recovery of any pipe or cable, or the placing of explosives and salvage.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which diving objectives may be included?</td>
<td>Scientific investigation, monitoring of marine/coastal/freshwater environment, including ecosystems, communities, populations, and sea bed forms, and marine wrecks, search and rescue and ground truthing.</td>
</tr>
<tr>
<td>Which occupational health and safety procedures apply?</td>
<td>Hazard analysis, risk assessment and application of the hierarchy of control.</td>
</tr>
<tr>
<td>From whom may notification and consent be obtained?</td>
<td>Enterprise dive officer, local/enterprise occupational health and safety person, occupational health and safety authority, and enterprise principal risk manager.</td>
</tr>
<tr>
<td>What may be included in the dive plan?</td>
<td>Location and personnel, dive objective(s), operational procedure(s), emergency procedure(s), special requirements including night dives, towing of divers, diving in remote areas and diving under large vessels, conditions and approvals.</td>
</tr>
<tr>
<td>To what may consumables refer?</td>
<td>Oxygen, compressed air, 'O' rings and straps.</td>
</tr>
<tr>
<td>Which enterprise requirements are relevant to this standard?</td>
<td>Dive procedures and standards of practice, equipment and personnel requirements, approval to dive and records.</td>
</tr>
<tr>
<td>Which standards and codes of practice apply to this standard?</td>
<td>Standards Australia AS2299 and any occupational health and safety codes of practice applicable in the jurisdiction.</td>
</tr>
<tr>
<td>What equipment may be included?</td>
<td>Vessels, two and four wheel drive vehicles and trailers, camping equipment and supplies, communication equipment including two way radios and mobile telephones, personal protective equipment including life vests, diving teams and dive assistants, oxygen equipment, fire safety equipment, safe dive kit, first aid kit.</td>
</tr>
<tr>
<td>Which pre-dive checks may be necessary?</td>
<td>Environmental, diver competence, transport (vehicle and vessel) and specialist equipment.</td>
</tr>
<tr>
<td>Which legislation may be relevant?</td>
<td>State/Territory and Commonwealth legislation in the areas of occupational health and safety, parks/reserves (both land and marine), coastal protection, marine operations, and the Great Barrier Reef.</td>
</tr>
<tr>
<td>What safety and emergency procedures may be relevant?</td>
<td>Communication, hyperbaric chamber, and oxygen procedures.</td>
</tr>
<tr>
<td>Which dive procedures may be included?</td>
<td>Entry, safety check, descent, objective, safety stop and exit.</td>
</tr>
</tbody>
</table>
Which dive logs are required under legislation and enterprise procedures?

Procedures used, personnel involved, observations made, samples collected, and records of incidents.

What are the dive risks that may be relevant to this standard?

Environmental, mechanical failure of equipment, hazardous marine animals, pollution in marine environment and other vessels.

Which equipment checks may be included?

Tanks, valves, submersible pressure gauges, hoses and hose configurations, regulators, alternate air sources, equipment releases, BCD operation, weight belt, mask and snorkel.

Which equipment faults may be identified?

Corrosion and wear, contaminated air, valve, hose, regulator and equipment release problems, regulator freezing.

What maladies may be included in this standard?

Decompression illness, hypothermia, stress, panic, embolism, lung expansion, equipment failure and marine bites/stings.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in performing diving for scientific purposes requires evidence that a scientific dive has been safely carried out according to enterprise guidelines and industry best practice. The skills and knowledge required to perform diving for scientific purposes must be transferable to a range of work environments and contexts. For example, this could include different environments, locations and purposes for the dive.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Physics of diving.
- No-decompression tables.
- Dive equipment.
- Dive planning
- AS2299 Scientific Diving.
- Rescue procedures.
- Oxygen administration procedures.
- Agency standing orders for notification.
- Emergency service procedures.
- Radio operation procedures.
<table>
<thead>
<tr>
<th>What specific skills are needed to achieve the performance criteria?</th>
</tr>
</thead>
<tbody>
<tr>
<td>To achieve the performance criteria, some complementary skills are required. These skills include the ability to:</td>
</tr>
<tr>
<td>• Plan diving operations.</td>
</tr>
<tr>
<td>• Prepare for diving operations conduct dive.</td>
</tr>
<tr>
<td>• Debrief diving team.</td>
</tr>
<tr>
<td>• Check and store equipment.</td>
</tr>
<tr>
<td>• Review diving program.</td>
</tr>
<tr>
<td>• Respond to diving maladies.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Are there other competency standards that could be assessed with this one?</th>
</tr>
</thead>
<tbody>
<tr>
<td>This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Essential Assessment Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>For information about <strong>assessing this competency standard for consistent performance</strong> and <strong>where and how it may be assessed</strong>, refer to the Assessment Guidelines for this Training Package.</td>
</tr>
</tbody>
</table>
RTD3509A Collect and preserve biological samples

Unit Descriptor
This competency standard covers the process of collecting and preserving biological samples as part of a monitoring program. It requires the ability to plan for collecting and preserving, prepare equipment and resources, carry out collecting and preserving, and complete collecting and preserving activities. Collecting and preserving biological samples requires knowledge of industry biological sampling and preserving guidelines and protocols, flora and fauna, environmental legislation, and sampling and preserving methods.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Plan for collection
   1.1 Sampling schedule is read/heard and confirmed with manager.
   1.2 Sampling site location is confirmed and approval obtained for site access following enterprise and legislative guidelines.
   1.3 Samples to be collected and preserved are identified by supervisory staff.
   1.4 Equipment requirements for biological sampling and preserving are determined and arranged.
   1.5 Range of likely operating conditions, hazards and difficult/sensitive environments are assessed for impact on sampling and testing.

2. Prepare equipment and resources
   2.1 Equipment required for sampling and preserving is sourced according to sampling procedures.
   2.2 Equipment is checked for availability and serviceability in accordance with enterprise procedures.
   2.3 Data or record sheets/books are collected for use.
   2.4 Equipment, data sheets and personnel are moved to sampling sites without injury or damage and readied for use.

3. Carry out biological sampling and preserving procedures
   3.1 Samples are collected in accordance with sampling plan and enterprise procedures and industry protocols/guidelines.
   3.2 Samples are preserved and recorded in accordance with sampling standards and guidelines.
   3.3 Samples for external analysis are prepared, packaged and sent to laboratory in accordance with sampling schedule and laboratory standards.
   3.4 Specific and general observations including information on relevant ambient and antecedent environmental conditions are made in accordance with monitoring schedule.
   3.5 Equipment operation and work practices conform to occupational health and safety requirements.
   3.6 Collection outcomes including presentation of samples are reported and delivered in accordance to enterprise guidelines.
4. Complete collection of biological sampling activities

4.1 Equipment and clothing is cleaned, sanitised, repaired and stored in accordance with enterprise procedures.

4.2 Damaged or malfunctioning equipment is repaired on site or sent to manufacturer or specialist.

4.3 Sampling results and observations are accurately recorded on data sheets and forwarded in accordance with enterprise procedures.

4.4 Changes in field conditions and equipment are conveyed to supervisor according to enterprise procedures.

KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Recording information regarding collecting and preservation activities.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Through completion of record sheets, taking of samples for external analysis and recording of observations.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Using appropriate equipment and in accordance with enterprise guidelines.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Cooperation with others in collecting and preserving activities.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Through recording scope and extent of activities and samples collected, using results and reporting to supervisor.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Dealing with unforeseen situations when carrying out collecting and /or preserving.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Use of field equipment and machinery.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What sampling site locations may be relevant to this standard?

Rivers, estuaries, lakes, dams, wetlands, waterways, coastal foreshores and waters, intertidal areas, national parks, and rural lands.
**What types of samples may be included?**

Macro invertebrates, aquatic vegetation, intertidal organisms, soil and water.

**What environmental legislation may be included?**

Fisheries Management Acts, threatened species conservation acts.

**What equipment may be included?**

Electronic machines, probes, grabs, nets, dredges, plankton nets, water sample bottles, bailer, still and video cameras, specialised machinery, identification keys and preserving equipment, kick seines, containers for holding and sorting samples, plastic buckets, hand-held magnifying glasses, tweezers or forceps, small vegetable brushes, wading boots, rubber gloves, thermometer, yardstick, sample record and assessment form, pencils, and clipboard and relevant field guides.

**Which occupational health and safety requirements may be included?**

Codes of practice, regulations and/or guidance notes which may apply in a jurisdiction, and enterprise-specific occupational health and safety procedures, policies or standards.

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**EVIDENCE GUIDE**

What evidence is required to demonstrate competence for this standard as a whole?

Competence in collecting and preserving biological samples requires evidence that biological samples have been appropriately collected and preserved for a given site according to prescribed enterprise procedures, standards and principles, collecting schedules and industry best practice. The skills and knowledge required to collect and preserve biological samples must be transferable to a range of work environments and contexts. For example, this could include different locations, environments, samples and collecting techniques.

**What specific knowledge is needed to achieve the performance criteria?**

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Hydrological cycle.
- Field procedures for biological sampling and preservation.
- Collecting equipment and methods.
- Preservation equipment and processes.
- Basic habitat assessment.
- Water quality issues.

- Fauna and flora recognition relevant to sampling activities.
- Relevant environmental legislation.
What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Plan for collection.
- Prepare equipment and resources.
- Carry out biological sampling and preserving procedures.
- Complete collection of biological sampling activities.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3703A Respond to rescue incidents

Unit Descriptor

This competency standard covers the process of responding to emergency and rescue incidents. It requires the ability to prepare for response, respond to incident, effect the rescue and implement post incident responses. Responding to rescue incidents requires a knowledge of local environmental conditions, search and rescue methods, operation and characteristics of rescue equipment, tools and vehicles, environmental, public health and safety issues, types of hazards and how they should be handled, enterprise procedures, legislative and first aid.

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare for response
   1.1 Equipment checked to ensure availability and serviceability.
   1.2 Task and operational instructions are obtained in accordance with enterprise procedures.
   1.3 Location details of incident is obtained in accordance with enterprise procedures.

2. Respond to incident
   2.1 Travel to incident location is undertaken in a safe and efficient manner.
   2.2 Communication with base station and other personnel is maintained at all times in accordance with enterprise procedures.
   2.3 On site search activities are carried out as necessary in accordance with enterprise procedures and OHS requirements.

3. Rescue is effected
   3.1 Incident scene is assessed and monitored for hazards and appropriateness of planned procedures.
   3.2 Planned procedures are modified where necessary in response to local circumstances in accordance with enterprise procedures, safety and OHS requirements.
   3.3 Support to other rescue services is provided as appropriate in accordance with enterprise procedures.
   3.4 Access to casualties is gained safely in accordance with enterprise procedures and OHS requirements.
   3.5 Protective equipment and clothing is used as appropriate in accordance with enterprise procedures, manufacturer's guidelines and OHS requirements.
   3.6 Equipment is operated safely and appropriately in accordance with enterprise procedures, manufacturer's guidelines and OHS requirements.
   3.7 Progress of rescue is communicated in accordance with enterprise procedures.
   3.8 Casualties are treated, monitored and moved to safety in accordance with first aid and OHS procedures.
4. Implement post incident responses

4.1 Equipment recovered, cleaned and serviced in accordance with enterprise procedures, manufacturer’s guidelines and OHS requirements.

4.2 Documentation is completed in accordance with enterprise requirements.

4.3 Incidents are reported in accordance with enterprise procedures.

4.4 Critical incident stress management is undertaken where necessary in accordance with enterprise procedures.

KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
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<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>By informing superiors and others of incidents.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Recording details of the incident.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>By responding to the incident.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>As a part of the rescue team.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Distances and times in response.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Determining options for response.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>With machinery and equipment.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which enterprise procedures may be included in this standard?

Schedules, protocols, recording and reporting.

A variety of environmental conditions may be included. What are these?

Weather, climatic conditions, remoteness, geophysical systems, local ecology, all terrain conditions, rivers, lakes, dams, seas, confined spaces, sewers, buildings, wells, shafts, trenches, silos, caves, day and night.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the different incidents to consider?</td>
<td>Fires, drowning, accidents, exposure to hazardous materials, injury, damaged to equipment, environment, significant sites, stranding, exposure, lost persons, vehicle, boating, aircraft accidents.</td>
</tr>
<tr>
<td>What sorts of rescue equipment may be included?</td>
<td>Support vehicles, boats, aircraft, fire extinguishing, control equipment, ropes, ladders, axes, spades, shovels, lifting, cutting equipment, winches, blocks, chainsaws, hand tools, power tools, generators, maps, torches, first aid, life support, protective clothing, stretchers, slings, rescue/spinal boards, two way radios and scene warning equipment.</td>
</tr>
<tr>
<td>How might access to casualties be made?</td>
<td>By normal entry, forced entry, constructed access routes, natural terrain, on foot, by vehicle, aircraft and vessel.</td>
</tr>
<tr>
<td>What sorts of maps may be included?</td>
<td>Topographic, cadastral, aeronautical, pastoral, road maps, street directory and specialist.</td>
</tr>
<tr>
<td>How might servicing and maintenance be undertaken?</td>
<td>Washing, disinfecting, lubricating and storing.</td>
</tr>
<tr>
<td>Which statutory requirements may be relevant to this standard?</td>
<td>OHS, Local Government, Public Health and Safety, Environmental Protection, Waste Management and Parks and Wildlife.</td>
</tr>
<tr>
<td>Which forms of communication may be undertaken?</td>
<td>One to one, as a team member, following instructions, giving directions to the public and reporting situations, outcomes and matters needing attention.</td>
</tr>
</tbody>
</table>
What evidence is required to demonstrate competence for this standard as a whole?

Competence in responding to rescue incidents requires evidence that an individual can demonstrate that they have the required knowledge and skills to respond to an incident according to enterprise guidelines and industry best practice. The skills and knowledge required to respond to rescue incidents must be transferable to a range of work environments and contexts. For example, this could include different types of incidents, environments, locations and rescue equipment.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Local environmental conditions.
- Search and rescue methods.
- Operation and characteristics of rescue equipment, tools and vehicles.
- Environmental, public health and safety issues.
- Types of hazards and how they should be handled.
- Enterprise procedures, legislative and OHS requirements.
- First aid, life preservation.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Prepare for response.
- Respond to incident.
- Effect the rescue.
- Implement post-incident responses.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3706A Maintain biological cultures

Unit Descriptor
This competency standard covers the process of maintaining biological control agents for weed control prior to release in an experimental or field situation. It requires the ability to prepare and propagate biological agent media, maintain and monitor cultures and harvest and store cultures. Maintaining biological cultures requires knowledge of the range of media available for culture maintenance, culturing and media preparation techniques, laboratory and glasshouse procedures and available biological control agents and their use.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare and propagate bioagent media

   1.1 Bioagent media to suit the host and target species are identified, selected and accessed consistent with enterprise procedures or integrated weed management strategy where applicable.

   1.2 Required media are prepared in line with established procedures and laboratory policy.

2. Obtain bioagent cultures

   2.1 Cultures are procured from established sources and microclimate maintained in transport to the laboratory.

   2.2 Cultures are transferred to growing environment in strict compliance with laboratory policy.

3. Maintain and monitor cultures

   3.1 Cultures are regularly checked as an integral part of work routines.

   3.2 Optimum environmental conditions are maintained to maximise culture growth and condition.

   3.3 Observations are recorded and abnormalities are reported to the appropriate authority.

4. Harvest and store cultures

   4.1 Routine monitoring of culture growth identifies the need for harvest and agent release.

   4.2 Harvesting program is determined in line with program requirements.

   4.3 Harvest operations are completed and cultures are transferred to storage in accordance with laboratory policy.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Written and verbal communication with suppliers, colleagues, supervisors and managers.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Observation, measurement of quantities and reporting to supervisor.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>According to characteristics of biological agents and enterprise guidelines.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Working closely with colleagues, landholders and supervisor prior to the release of the agent.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Calculation of quantities and supplies of biological agents.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Addressing difficulties that may arise during storage and maintenance.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Monitoring health, handling and reporting on biological agents.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this unit of competency. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which bioagents may be included?

Plants, vegetable, agars, soil and other suitable media.

Which laboratory policy standards may be prescribed?

Hygiene, cleaning and sterilisation, quarantine, culture storage and monitoring, recording and reporting.

How might the culture environment be maintained?

Food, temperature, light, water, humidity and habitat.

How may monitoring of cultures be undertaken?

By observing and recording the health of the culture, population and growth stage.
What situations might the release of biological control agents be related to?

Field experiments, glasshouse experiments, pot experiments and field release.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in maintaining biological cultures requires evidence that a biological agent is maintained and stored in an effective way to optimise its potency on targeted weed species. The skills and knowledge required to maintain biological agents must be transferable to a range of work environments and contexts. For example, this could include alternate bioagents, storage requirements and laboratories.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- The range of media available for culture maintenance.
- Culturing and media preparation techniques.
- Laboratory and glasshouse procedures.
- Available biological control agents and their use.
- The broad range of pest species that are to be targeted.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Prepare and propagate bioagent media.
- Obtain bioagent cultures.
- Maintain and monitor cultures.
- Harvest and store cultures.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function. In some situations, this unit can be assessed concurrently with RUC384PDA Release biological agents.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3707A  Release biological agents

Unit Descriptor
This competency standard covers the process of releasing biological control agents for weed or pest animal control in an experimental or field situation. It requires the ability to establish the scope of agent release, identify the site and release methodology, carry out on-site tasks and monitor and report on biological agent releases. Releasing biological agents requires knowledge of insect, animal and/or plant identification using identification keys, pest species physiology and growth, relevant legislative requirements and safe handling techniques.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Establish the scope of agent release
   1.1 Target plant species are located and identified consistent with integrated pest management strategy where applicable.
   1.2 Incidence and density of the target population are estimated and recorded according to enterprise procedures where appropriate.
   1.3 Suitable biological control agents are identified and sourced consistent with enterprise procedures and/or integrate pest management strategy.

2. Identify the site and release methodology
   2.1 Release site is identified in line with target species and integrated pest management strategy.
   2.2 Release methodology is established and scheduled in line with established agency advice or enterprise practice.

3. Carry out on-site tasks
   3.1 Permits and landholder co-operation are established to facilitate release program.
   3.2 Release is carried out within enterprise or industry guidelines regarding weather or other conditions.
   3.3 Release is completed as scheduled according to release methodology and details are recorded in laboratory and field records following enterprise procedure or industry standard.

4. Monitor and report on biological agent releases
   4.1 Biological agent release site is monitored to evaluate effectiveness and spread to target species consistent with the integrated pest management strategy where appropriate.
   4.2 Regular reports are provided to landholder and regulatory authorities.
   4.3 Records are completed as required by agency requirements.
   4.4 Biological agent releases are scheduled according to agent and target biology consistent with the integrated pest management strategy.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Written and verbal communication with colleagues, landholders, supervisors and managers.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Site visits, observation and reporting to supervisor.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>According to characteristics of biological agent and enterprise guidelines.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Working closely with colleagues, landholders and supervisor in the release of the agent.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Calculation of required quantities and distribution of biological agent.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Addressing difficulties that may arise during release or as part of post-release monitoring.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Handling, transporting and release methodology of biological agents.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this unit of competency. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which biological control agents may be included? Those for insects, fungi, plants, pest animals and other suitable agents.

What situations might the release of biological control agents be related to? Field experiments, confined areas and field release.

What might be included in site sampling? Collection and processing of samples of soils, plant materials, population counts, photography, insects and fungal material.

What might be included as part of the release methodology? Storage and handling of biological agents.
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in releasing biological agents requires evidence that a biological agent is handled and released in an effective way to optimise its impact on targeted pest species. The skills and knowledge required to release biological agents must be transferable to a range of work environments and contexts. For example, this could include alternate agents, pest species or release methodologies.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Insect, animal and/or plant identification principles.
- Use of identification keys.
- Pest physiology and growth.
- Relevant legislative requirements.
- Safe handling techniques.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Establish the scope of agent release.
- Work effectively in a team situation in the lab or field.
- Identify relevant pest species.
- Identify the site and release methodology.
- Operate relevant vehicles and plant.
- Carry out on-site tasks.
- Observe effectively and report accurately.
- Monitor and report on biological agent releases.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function. In some situations, this unit can be assessed concurrently with RUC385PDA Maintain biological agents.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3709A Handle and store explosives

Unit Descriptor
This competency standard covers the process of safe handling, storage, loading and transporting of explosives in line with established industry standards. It requires the ability to identify and accurately state the requirements for the handling, storage and transport of explosive products, complete accurate work reports and explosives records, and correctly identify essential components of requirements for the loading and transport of explosives. It also requires knowledge of local handling and storage conditions, current transport legislation, loading and transporting procedures, the Australian Explosives Code (2nd edition), fire and deterioration preventive measures of stored materials and the procedures for purchasing explosives.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare for the handling of explosives
   1.1 Legislative requirements for the handling, storage and transport of explosives are identified and actioned in line with specified quantities of explosives.
   1.2 Signage and placarding on vehicles or storage facilities for explosives are prepared and displayed as directed by legislative requirements.
   1.3 Monitoring and recording systems for authorisation to handle, store and transport explosives are established according to legislative requirements.

2. Transport explosives
   2.1 Arrangements to maintain the integrity and security of transported explosives are established in line with enterprise requirements.
   2.2 Security procedures to ensure explosives arrive at the destination intact according to specified time and condition are instituted.
   2.3 Workplace strategies to carry out emergency procedures as required are implemented in compliance with legislative requirements.
   2.4 Explosives are loaded and transported in accordance with all prevailing legislation and individual enterprise requirements.

3. Store explosives
   3.1 The requirements for the safe and secure storage of explosives are defined and actioned in accordance with legislative requirements.
   3.2 Requirements for personnel authorised to gain access are defined according to legislative requirements.
   3.3 Security is monitored and maintained in accordance with legislative requirements and the enterprise.
   3.4 Recording systems for the handling and storage of explosives products are accurately implemented in line with legislative requirements.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
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<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Using Standards and Acts for loading, storage and transport of explosives to be used by rural producers.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Determine suitable loading, storage and transport of commercially procured explosive products appropriate to the particular farm use needs.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>By planning the loading, storage and transport for explosives to be used by rural workers.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>With those involved with the loading, storage and transport of explosives.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>In calculating quantities of explosives to be used and in storage.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>In the loading, storage and transport of explosives.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Involving storage facilities for explosives.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What variations in the types of vehicles permitted to carry explosives may be relevant to this standard? Individual State or Territory legislation may vary.

What variations in the quantities of explosives permitted to be transported may be relevant to this standard? Individual State or Territory legislation may vary.

What maintenance of the integrity and security of transported explosives may be included? Specification of emergency procedures, rest stops, and the separation of components including detonators and between classes of explosives.
Which areas in regard to storage of explosives may be considered?
Quantities, periods of storage, standards compliance, security and security monitoring, safety distances, signage, approvals and notifications.

What security procedures and systems may be included?
The provisions of AS Explosives Code - Storage and Transport; Australian Code for the transport of explosives by Road and Rail (ATE Code); and/or other State or Territory legislation.

Which security requirements will be found in Australian Standards?
AS2187.2 - 1993, Explosives - Storage, transport and use.
AS1216 - 1995, Class labels for dangerous goods, and/or in any the relevant State and Territory legislation.

How must all explosives be stored?
According to legislative requirements.

EVIDENCE GUIDE
What evidence is required to demonstrate competence for this standard as a whole?
Competence in handling and storing explosives requires evidence that safe handling, storage, loading and transporting of explosives has been carried out according to enterprise guidelines and industry best practice. The skills and knowledge required to handle and store explosives must be transferable to a range of work environments and contexts. For example, this could include different explosives, situations and local conditions.

What specific knowledge is needed to achieve the performance criteria?
Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Local conditions and factors in the handling, transporting and storage of explosives.
- Actual performance of correct loading and transporting components of explosive products.
- Care and preventive measures required to eliminate risk of fire and deterioration of stored materials.
- Procedures for buying commercial explosives and blasting agents from licensed dealers and Government agencies.
- Australian Explosives Code (issued by Commonwealth Dept. of Transport and Regional Services).
- Identification of defective or damaged explosives.
- Environmental conditions required for safe storage.
What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Identify and accurately state the requirements for the handling, storage and transport of explosive products.
- Complete accurate work reports and explosives records.
- Correctly identify essential components of requirements for the loading and transport of explosives.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3710A Identify and select explosive products

Unit Descriptor

This competency standard covers the process of identifying and selecting explosive products and/or suitable mixtures that can be utilised for blasting for agricultural or land management purposes. It requires the ability to examine explosives and determine their classification, select explosives for particular tasks, complete accurate work reports and interviews, estimate the likely effect of explosives on structures, personnel and livestock in the site vicinity, and select appropriate fly-rock control devices. Identifying and selecting explosive products requires knowledge of legislative requirements, identification, uses, properties and performance of various explosive products and their suitability for particular purposes and the behaviour of the substrate material.

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Identify explosives applications

1.1 The job application requiring the use of explosives is identified in consultation with the field manager or supervisor.

1.2 The site for blasting is accurately identified and the surrounding area checked to confirm that all aspects of safety have been considered and actioned.

1.3 Potential side effects of the blast are identified in consideration of all site characteristics and are used in the planning of blasting operations.

1.4 Environmental implications of the intended explosives usage are considered in the planning of blasting activities.

1.5 Alternatives to the use of explosives are considered in the planning of the application and are utilised as appropriate.

2. Select explosives components

2.1 Explosives are selected to match the application, site and identified hazards at the blasting site.

2.2 The quantity of explosive energy required is established in line with the site characteristics and the designated application.

2.3 Initiator device selection reflects industry best practice and is matched to explosives selection.

2.4 Safety fuses are utilised as required to suit the application.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>With other staff, and all personnel involved in the activity.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Through reports to supervisor and/or work team.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>According to enterprise policies and guidelines and safe work practices.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>In the identification and selection of explosive products.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Calculating quantities, timing and mixtures.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Interpreting symbols and signage codes and labels.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Determining the amount and nature of explosive products and blast geometry required.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which property policies may be defined in explosives applications?

The enterprise, safety procedures, qualified personnel, methods of signage and notification, and the requirements for property records.

What tasks requiring the use of explosive products may be included?

Fragmentation or displacement.

Who might be included in the term supervisor?

The site foreman, property manager or contractor.

What side effects of blasting may be considered?

Ground vibration, air blast, fly rock, fumes and noise.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What alternatives to the use of explosives may be considered?</td>
<td>A range of earthmoving machinery operations and a range of manual activities.</td>
</tr>
<tr>
<td>What may be included in explosives selection?</td>
<td>Explosive compounds, detonators and primers.</td>
</tr>
<tr>
<td>What might bulk charges be?</td>
<td>Commercially procured explosives/blasting agents or ammonium nitrate/Fuel Oil (ANFO) and compounds mixed on site.</td>
</tr>
<tr>
<td>Which explosives compounds may be included?</td>
<td>Water gels, slurries, emulsions, ammonium nitrate explosives (ANFO), black powder or special purpose explosives.</td>
</tr>
<tr>
<td>How might detonation be initiated?</td>
<td>By chemical or electrical means.</td>
</tr>
<tr>
<td>Which non-electric detonators with signal tubes attached may be included?</td>
<td>Instantaneous or delay types.</td>
</tr>
<tr>
<td>Which properties of explosives and blasting agents may be considered?</td>
<td>Density, bulk and weight strength, Velocity of Detonation (VOD), effective energy, sensitivity (both to temperature and shock) and critical diameter, water resistance, reaction products, handling characteristics, price/unit for mass and energy, and primer requirements.</td>
</tr>
<tr>
<td>How might commercial explosives be accidentally/inadvertently ignited?</td>
<td>By heat, shock or impact.</td>
</tr>
<tr>
<td>What detonation methods may be included?</td>
<td>Use of plain, electrical or non-electrical detonators and may be instantaneous or delayed.</td>
</tr>
<tr>
<td>What do the primers used for rural applications usually consist of?</td>
<td>A stick of detonator sensitive explosive to which the detonator or detonating cord is attached.</td>
</tr>
<tr>
<td>What is the usual method of initiation of ANFO?</td>
<td>By way of a primer, initiated by a safety fuse and/or detonating cord.</td>
</tr>
<tr>
<td>What firing systems for explosive charge elements may be included?</td>
<td>Safety fuse, plain or non-electric detonators, primer of detonator sensitive explosive, wires, electric detonators, plain detonating cord and delay detonators.</td>
</tr>
</tbody>
</table>
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in identifying and selecting explosive products requires evidence that explosive products have been correctly identified and selected according to enterprise guidelines and industry best practice. The skills and knowledge required to identify and select explosive products must be transferable to a range of work environments and contexts. For example, this could include different explosive products, situations and local conditions.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Identification of the components of various explosive products.
- Indications for the uses of various explosive products.
- Performance of various explosive products, the behaviour of the substrate material (e.g., sand, soil, rock, etc.) when subject to blasting.
- Jobs requiring the use of explosives (e.g., blowing stumps, rabbit warrens, excavating a dam site and excavation requirements, fence post holes, tree or vine holes, rock floaters, etc.).
- Particular properties of explosives/blasting agents and their suitability for particular purposes.
- Other State and Territory legislation.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Examine explosives and determine their classification.
- Select explosives for particular tasks.
- Complete accurate work reports and interviews.
- Estimate the likely effect of explosives on structures, personnel and livestock in the site vicinity.
- Select appropriate fly-rock control devices, e.g., blasting mats as required.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.
Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD02 Conservation And Land Management Training Package (Version 1) To be reviewed by: 31 May 2005
RTD3711A Prepare and use explosives

RTD3711A Prepare and use explosives

Unit Descriptor
This competency standard covers the process of safely carrying out explosive procedures including preparation, mixing, detonation and clean up in the field. It requires the ability to use explosives, dispose of surplus, defective or unwanted detonators or explosives, accurately complete usage and disposal reports, correctly and uniformly mix explosives components and apply the regulations relating to explosives use according to enterprise requirements. Preparing and using explosives requires a knowledge of fire precautions and prevention procedures, appropriate explosives mixing procedures, the calculation of explosives quantities, blast measurements, explosives preparation, placement, firing and post-firing procedures, regulations relating to the use of explosives in the enterprise, related environmental issues and risks to livestock.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare for blasting
   1.1 Permits/licences are obtained and approved warning signs installed and prominently displayed according to legislative requirements.
   1.2 Property manager and relevant controlling authorities are notified of blasting plans and timing as required by legislation.
   1.3 The area where the charges are to be used is cleared of stones and other potential missiles.
   1.4 The blast site is cleared and made safe prior to charges being placed.
   1.5 All explosive products are placed at the required safety distance from any identified hazards.
   1.6 Appropriate holes are drilled/dug to place the charge(s) in line with blasting plans.
   1.7 Drilling/digging equipment is removed to the prescribed safe distance in accordance with Australian Standards, Acts and Regulations.
   1.8 Neighbours and members of the public likely to be concerned or disturbed by shock effects are advised of the blasting program.

2. Prepare explosives
   2.1 Quantities of explosives components required are calculated to match the application and prevailing conditions.
   2.2 Required explosives are assembled on site, or an explosives mix (of homogenous composition) is calculated precisely to ensure minimum residual mix to be destroyed, and is prepared in accordance with defined requirements.
   2.3 Required fusing and detonating components are assembled to match the established explosive requirements in preparation for blasting.
### 3. Place charges

| 3.1 | Explosives elements are placed in holes or packed using safe working **procedures** and methods and in accordance with Australian Standards, Acts and Regulations. |
| 3.2 | All holes are stemmed and tamped prior to the attachment of the firing system to maximise safety to all personnel and the efficiency of the blasting. |
| 3.3 | Electrical firing circuits or fire fuses are checked for continuity and/or earthing as required. |
| 3.4 | All extraneous materials are cleared from the site to safe distances in accordance with enterprise standards. |
| 3.5 | Routine re-checks of the site and surrounds are performed to ensure that no non-essential personnel are endangered. |
| 3.6 | Blasting mats or other **control devices** are placed as appropriate according to the blasting plan. |
| 3.7 | Blast area is guarded according to legislative requirements and enterprise practices. |

### 4. Fire charges

| 4.1 | Prescribed warning notification procedures are carried out in accordance with enterprise and industry standards. |
| 4.2 | The blasting site is re-checked to ensure correct placement of explosives and ensure that all safety procedures have been implemented according to supervisor or shot firer's instructions. |
| 4.3 | Warning signals including audible and visual signals are issued to ensure that the site is clear. |
| 4.4 | Firing procedures are initiated through manual or electric firing systems. |

### 5. Conduct post-firing procedures

| 5.1 | Charges are counted as they fire or are inspected safely post blasting to ensure that misfires are readily identified prior to all clear signals being given. |
| 5.2 | Misfire procedures are implemented after prescribed timing and/or practice drills conducted using water jets or additional charges in accordance with Australian Standards, Acts and Regulations. |
| 5.3 | Site checks are carried out to ensure that the site is safe and the all-clear signal is given in line with industry practice and legislative requirements. |
| 5.4 | **Surplus, unserviceable and defective explosives** and detonators are destroyed or discarded or stored in line with prescribed procedures and in consideration of the environmental impact. |
| 5.5 | Accurate records are completed and kept in line with enterprise and legislative requirements. |
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tbody>
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<td>Communicating ideas and information</td>
<td>Communicating with all personnel with regard to timing and blasting intentions.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>In the organisation or preparation for, conduct of blasting and post firing procedures.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>According to enterprise practices and procedures.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Maximise the safety of all personnel involved by ensuring the safest possible usage of explosives.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Measuring and/or estimating quantities.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Through identifying potential hazards in the planning and preparation work.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Electrical firing, communicating and calculating with staff, neighbours etc.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Who is permitted to use explosives? Only licensed persons.

Which licence is required for electrical detonation? Varies according to state legislation.

What hazards to electrical firing may be included? Thunderstorms, both high and low voltage power transmission, electric fencing, conductive earths, radio and TV transmitters, mobile phones, two way radios, electrostatic hazards and other stray currents.

Under which procedures can explosives be used? Only under the approved procedures prescribed in relevant standards issued by the Standards Association of Australia.
In which situation might control devices not be required?
Blasting mats or other control devices may not be required in a field situation.

How should surplus, unserviceable or defective explosives or components be destroyed?
Through detonating, burning or dissolving in water.

Where would precautions and methods relating to use of explosives be found?
AS 2187, Part 2 1993 which includes operations prior to charging, charging, preparation for firing, firing, misfires and preparation of primers.

In what form should ammonium nitrate be?
Porous prill.

What items may be used for mixing?
Items may include but are not restricted to plastic buckets, bottles and scoops.

For what purpose should a colouring agent be used?
To differentiate mixed explosive from unmixed ingredients and to aid in the determination of uniformity of the mix.

How should excess mix be stored?
It must be packed and labelled in accordance with current state legislation.

For what purpose are colouring agents used?
To gauge uniformity visually.

Which explosives may be included in those for disposal?
Those considered surplus or unsafe for transport, storage or use.
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in preparing and using explosives requires evidence that explosives procedures - including preparation, mixing, and detonation and clean up in the field - have been safely carried out according to enterprise guidelines and industry best practice. The skills and knowledge required to prepare and use explosives must be transferable to a range of work environments and contexts. For example, this could include different explosives, procedures, locations and local conditions.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Fire precautions and prevention procedures.
- Appropriate explosives mixing procedures.
- The calculation of explosives quantities.
- Blast measurements.
- Explosives preparation, placement, firing and post firing procedures.
- The regulations relating to explosives use in the enterprise.
- Relevant standards issued by Standards Association of Australia.
- Related environmental issues and risks to livestock (including poisoning).

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Use explosives safely and effectively according to enterprise requirements.
- Dispose of surplus, defective or unwanted detonators or explosives safely.
- Accurately complete usage and disposal reports.
- Correctly and uniformly mix explosives components.
- Apply the regulations relating to explosives use according to enterprise requirements.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3802A Provide appropriate information on cultural knowledge

Unit Descriptor
This competency standard covers the process of Indigenous people maintaining cultural knowledge and directing if and how this knowledge may be provided to others. It requires the ability to investigate cultural knowledge, identify locations and patterns of plants and animals in a specific area, identify plants, animals and resources used for medicine and food and relate information on cultural knowledge to others. Providing appropriate information on cultural knowledge requires a knowledge of cultural knowledge about plant and animals relating to a particular community, group or region, common and Indigenous names for plants and animals, and individuals who are authorised to possess cultural knowledge.

Note: Delivery and assessment against this competency standard must comply with community protocols and guidelines and be supported by elders and custodians of country.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Investigate cultural knowledge

1.1 Cultural knowledge is accessed through reference to an appropriate person according to community guidelines and cultural protocols.

1.2 Key principles, values and practices of cultural knowledge are determined and recorded according to community protocols.

1.3 The relationship between cultural knowledge and management of country is defined according to community protocols.

1.4 Ownership of and parameters for transferring cultural knowledge are established according to community protocols.

2. Identify locations and patterns of plants and animals in a specific area

2.1 Relationships between land, rivers, lakes and sea management practices and seasonal cycles are identified and documented in an accessible record.

2.2 Common and Indigenous names are used to describe plants and animal according to community guidelines and cultural protocols.

2.3 Relationships between spirituality and people to complement the accessible record are noted.

2.4 Appropriate people are used to confirm findings.

3. Identify plants, animals and resources used for medicine and food

3.1 Bush foods and medicines for a specific area are identified and recorded.

3.2 Common and Indigenous names are used to describe plants and animal according to community guidelines and cultural protocols.

3.3 Plant and animal samples are collected for future identification.

3.4 Issues in relation to Indigenous access and use are defined and documented.
4. Relate information on cultural knowledge to others

4.1 Information on cultural knowledge is provided to those who are authorised to possess that knowledge according to community guidelines and cultural protocols.

4.2 Information on cultural knowledge is related in an appropriate format and medium according to community guidelines and cultural protocols.

4.3 Requests for disclosure of information on cultural heritage that infringes intellectual property rights of a group or community are referred to appropriate persons according to community guidelines and cultural protocols.

4.4 Requests for disclosure of information on aspects of cultural knowledge by unauthorised individuals are appropriately declined.

KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Communication of ideas and information can be applied through oral and written communications with appropriate persons.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information can be collected, analysed and organised through taking samples of plants and animal traces.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Activities can be planned and organised through interaction with groups and communities according to community guidelines and cultural protocols.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Team work can be applied through sharing of information on cultural knowledge with authorised persons.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical ideas and techniques can be applied through determining patterns and plant and animal distribution.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problem solving skills can be applied through determining the scope and type of information that can be appropriately related to others.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology can be applied when recording information through the use of computer applications, maps and GIS data.</td>
<td>1</td>
</tr>
</tbody>
</table>
## RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what groups does the term Indigenous people refer?</td>
<td>Aboriginal and Torres Strait Islander peoples of Australia.</td>
</tr>
<tr>
<td>What accessible records may be used?</td>
<td>Seasonal calendar, cultural and heritage records from local Aboriginal Land Councils, pharmacopoeia, diaries, GIS maps with overlays and maps with overlays.</td>
</tr>
<tr>
<td>Which appropriate people may be included?</td>
<td>Elders, Council of Elders, Aboriginal Lands Councils, medicine people, governing committees, traditional owners, community rangers, Culture and Heritage officers, National park rangers and Marine park rangers.</td>
</tr>
<tr>
<td>What cultural knowledge may be relevant to this competency standard?</td>
<td>Indigenous land, rivers, lakes and sea resources, their uses and the relationships between plants, animals and community.</td>
</tr>
<tr>
<td>Which specific areas could be relevant to this standard?</td>
<td>Own country or area of choice, e.g., - defined community area, National park, State forest, nature reserves, Crown lands, marine park and private land.</td>
</tr>
<tr>
<td>Who is an authorised person?</td>
<td>An authorised person is an individual to whom certain information or knowledge can be disclosed without infringing on cultural protocols and rights to that knowledge. This can include both Indigenous and non-Indigenous people.</td>
</tr>
<tr>
<td>Which seasonal calendar may be referred to?</td>
<td>Seasonal calendar relates to region, climate or community.</td>
</tr>
</tbody>
</table>
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in providing appropriate information on cultural knowledge requires evidence that information on cultural knowledge is appropriately maintained by an individual, that this information has been related to an authorised person and that the protocols on disclosure of cultural knowledge are understood. The skills and knowledge required to provide appropriate information on cultural knowledge must be transferable to a range of work environments and contexts. For example, this could include different plans, animals and relationships.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Cultural knowledge about plant and animals relating to a particular community, group or region.
- Common and Indigenous names for plants and animals.
- Cultural protocols relevant to region, community and scope and type of cultural knowledge.
- Role and rights of Indigenous peoples in maintaining and controlling cultural knowledge.
- Individuals who are authorised to possess cultural knowledge.
- Intellectual and cultural property rights.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Listen and communicate effectively.
- Investigate cultural knowledge.
- Identify locations and patterns of plants and animals in a specific area.
- Identify plants, animals and resources used for medicine and food.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3804A Supervise park visitor activities

Unit Descriptor
This competency standard covers the process of giving of advice to, and supervising public access and activities within a park or reserve. It requires the ability to open and close park/reserve, advise public on park/reserve access and activities, and monitor visitor activities. Supervising park visitor activities requires knowledge of the local environment and potential hazards, limits to personal and legal authority, public relations, cultural diversity and managing conflict.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Open and close park/reserve
   1.1 Park/reserve is opened and closed as scheduled in accordance with enterprise procedures.
   1.2 Security systems are operated in accordance with manufacturer's guidelines and enterprise procedures.
   1.3 Public is informed of opening and closing times in accordance with enterprise procedures.
   1.4 Non-compliance with park/reserve access conditions is acted upon in accordance with enterprise procedures.

2. Advise public on park/reserve access and activities
   2.1 Public is communicated with in a courteous, confident and effective manner appropriate to their background.
   2.2 Public is informed of responsibilities and safety requirements when using park facilities in accordance with enterprise procedures, legislative and public health and safety requirements.
   2.3 Public is informed of changes to access rights to park facilities when these have been affected by changes to environmental conditions in accordance with enterprise procedures and public health and safety requirements.

3. Monitor visitor activities
   3.1 Non-compliance with park/reserve access conditions is acted upon in accordance with enterprise procedures.
   3.2 Incidents are reported and responded to in accordance with enterprise requirements.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Instructions and information.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Visitor behaviour and needs.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Visitor activities.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Managing visitors.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Monitoring visitors.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Dealing with issues arising with visitors.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Through the use of communication and security equipment.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

**What enterprise procedures may be included?**
Schedules, plans, protocols, methods of enforcing regulations, recording and reporting, and appropriate technologies.

**How will this standard advise the public on park/reserve activities?**
Direct communication, flags, signs, pamphlets, posters and public address systems.

**What facilities might by included?**
Public conveniences, recreation areas, walking tracks, interpretation areas, shelters, displays, kiosks, cultural sites and conservation/preservation areas.

**What sorts of changes to environmental conditions might be relevant?**
Adverse weather conditions, flooding, wildfires, repair, reconstruction and maintenance of facilities.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which environmental conditions may be appropriate to this standard?</td>
<td>Weather, climatic conditions, geophysical systems, local ecology, topography and remoteness.</td>
</tr>
<tr>
<td>What enterprise types may be included?</td>
<td>Size, resources, organisational and administrative structure, numbers of clients, visitors, private, government ownership and recreational.</td>
</tr>
<tr>
<td>Which enterprise programs may be relevant?</td>
<td>Conservation of natural and cultural resources and level of public accessibility.</td>
</tr>
<tr>
<td>What might constitute maintenance in this standard?</td>
<td>Cleaning and tidying.</td>
</tr>
<tr>
<td>How might reporting be undertaken?</td>
<td>Verbally and by completing check sheets.</td>
</tr>
<tr>
<td>Which legislative requirements may be included?</td>
<td>OHS, Local Government, Public health and safety, Environmental protection, Waste management. Parks and wildlife.</td>
</tr>
<tr>
<td>What types of equipment may be relevant to this standard?</td>
<td>Motor bikes, 2 &amp; 4 wheel drive vehicles, flags, signs, brochures, posters, megaphones, public address systems, two way radios, mobile phones, padlocks, gates, barriers, electronic security systems and simple hand/power tools.</td>
</tr>
<tr>
<td>Which literary instructions may be included?</td>
<td>Read and interpret instructions/ guidelines, completion of appropriate forms, check sheets and reports of actions taken or needing to be taken.</td>
</tr>
<tr>
<td>How might communication be undertaken?</td>
<td>One to one, public relations, giving directions, and by reporting outcomes and matters needing attention.</td>
</tr>
<tr>
<td>What might incidents include?</td>
<td>Breaches of park regulations and legislative requirements, damaged plant, facilities and equipment, breaches of security, injury, accidents, hazards to public health and safety and distressed persons.</td>
</tr>
</tbody>
</table>
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in supervising park visitor activities requires evidence that park visitor activities have been appropriately supervised according to enterprise guidelines and industry best practice. The skills and knowledge required to supervise park visitor activities must be transferable to a range of work environments and contexts. For example, this could include different parks, visitor groups and activities and environments.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Local environment, environmental hazards.
- When to enforce regulations, limits to personal and legal authority.
- Public relations, crowd behaviour, implications on cultural diversity.
- Enterprise procedures, OHS and legislative requirements.
- Interpersonal skills and relating to different cultural groups.
- Deal with unco-operative persons, assert authority and resolve conflicts.

- Instructions/guidelines and regulations and maps.
- Use equipment appropriately.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Open and close park/reserve.
- Advise public on park/reserve access and activities.
- Monitor visitor activities.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3811A Coordinate board/committee elections

Unit Descriptor

This competency standard covers the process of coordinating committee or board elections for an unincorporated group or incorporated association. It requires the ability to call for nominations, conduct elections, promote a positive election atmosphere and declare results. Coordinating board/committee elections requires a knowledge of articles, rules and practice of the group, election procedures used by other groups and in other voluntary organisations, voting method to be used, and community and cultural perspectives.

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Seek nominations

1.1 Election requirements required under the rules and past practice are identified to establish correct election procedures.

1.2 Nominations are called for officers and committee positions that will become vacant according to the group/association rules and practice.

1.3 Nominations are checked for validity according to the group/association rules and practice.

1.4 Procedures to fill positions where there are no nominations are implemented according to the group/association rules and practice.

2. Conduct elections

2.1 Nominations for uncontested positions are declared filled according to the group/association rules and practice.

2.2 Election date is set according to group/association rules and practice.

2.3 Ballot papers are prepared according to the number of nominations and the voting method described in the group/association rules and practice.

2.4 Voting is managed to ensure a fair ballot by persons eligible to vote according to the group/association rules and practice.

2.5 Any voting irregularities are assessed for impact on result, with any invalid elections being declared void.

3. Promote a positive election atmosphere

3.1 Positive attitude of co-operation between candidates is promoted to maintain group harmony.

3.2 Issues and complaints are addressed in a positive manner according to the rules, to ensure group satisfaction with the election process.

3.3 Minority interests are facilitated to ensure equitable representation.

4. Declare results

4.1 Votes are counted using a counting method that ensures a fair count according to the group/association rules and practice.

4.2 Results are announced or provided to the group/association chair according to the group/association rules and practices.

4.3 Records of results are completed according to group/association rules and practice.

4.4 Grievances are addressed according to articles of association, group rules and practice.
KEY COMPETENCIES
What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>By discussing at meetings or formally in writing with clients and stakeholders.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Coordinating board/committee elections will require information to be gathered from a variety of external sources and organised for election purposes.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Coordinating board/committee elections requires some planning election procedures and organising of board or committee members.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Coordinating board/committee elections will require liaising with work teams and others to achieve outcomes.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical techniques can be applied in counting and declaring results.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>During coordinating board/committee elections technical and/or organisational problems may arise requiring innovative solutions.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be required to prepare for elections and meetings, administer voting procedures and declare results.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What are the election requirements relevant to this standard?
The vacancies, procedures for election, eligible persons, time between elections are defined in the rules or practice.

Where would the rules of the association be found?
In the constitution or operational practice or rules of unincorporated group

What may be the voting method for this standard?
Show of hands, secret ballot, first past the post and preference.
What might be the counting method?
Show of hands by nominated persons and by ballot papers in a separate room by nominated persons.

What is meant by past practice/practice?
Previous informal procedures or procedures used by this or other groups in similar situations.

Which people could be included as officers of the association?
The positions named in the rules such as Chair/President, Assistant Chair/President, Secretary, Assistant Secretary, Treasurer, Public Officer and Promotions Officer.

What forms of communication may be relevant?
Promote elections and provide explanations to individuals and group on procedures.

What levels of literacy are included?
Read association/group rules and count ballot papers.

EVIDENCE GUIDE
What evidence is required to demonstrate competence for this standard as a whole?
Competence in coordinating board/committee elections requires evidence that a committee or board election for a community group has been properly coordinated according to community and agency guidelines and best practice procedures. The skills and knowledge required to coordinate board/committee elections must be transferable to a range of work environments and contexts. For example, this could include different community groups and local or cultural perspectives.

What specific knowledge is needed to achieve the performance criteria?
Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Articles, rules and practice of the group.
- Election procedures used by other groups and in other voluntary organisations.
- Voting method to be used.
- Understanding of range of community perspectives and perspectives brought by individuals to group.

What specific skills are needed to achieve the performance criteria?
To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Seek nominations.
- Conduct elections.
- Promote a positive election atmosphere.
- Declare results.

Are there other competency standards that could be assessed with this one?
This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.
Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
**RTD3812A Coordinate fund-raising activities**

**Unit Descriptor**

This competency standard covers the process of coordinating fundraising activities for local community groups or programs. It requires the ability to present ideas at meetings, approach and enlist support of volunteers, coordinate committees/teams, negotiate for sites and resources, plan and coordinate activities and implement general risk management. Coordinating fundraising activities requires a knowledge of scope of acceptable activities within various cultures/groups in the community, budgets for management of costs, basic money/cash handling and recording of expenses and income, permits required for fundraising activities and meeting procedures.

**Unit Sector**

No Sector Assigned

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Seek fundraising ideas | 1.1 Requirements for funds are identified to determine extent of fundraising.  
1.2 Successful **fundraising activities** used by this or other groups are identified for further investigation.  
1.3 Potential new fundraising activities are compared to existing methods to determine preferred fundraising activities.  
1.4 **Potential fundraising** ideas are reviewed in conjunction with other leaders to identify preferred fundraising activity(s).  
1.5 **Views of individuals** in groups are considered in determining preferred fundraising activities. |
| 2. Select and develop ideas | 2.1 Required resources and potential **net income** from preferred fund raising activities are estimated.  
2.2 Selected fundraising activities are submitted with reasons to group for approval according to **group practices** to obtain group agreement. |
| 3. Conduct fundraising | 3.1 Volunteers to manage and/or support required activities in fundraising program are sought and duties negotiated.  
3.2 Volunteers required to organise fundraising are organised into committee and/or teams.  
3.3 Fund raising activities comply with public safety, occupational health and safety, and other **legislative and local government requirements**.  
3.4 Fundraising activities are supervised according to group requirements to ensure optimum return for group with available resources, and to present a positive image of the group.  
3.5 **Cash handling** procedures are used to ensure security of money collected.  
3.6 Sites of activities are checked to ensure they are tidy to requirements before and after.  
3.7 Results from fundraising activities are recorded for review. |
| 4. Review results | 4.1 Results are reviewed and submitted to group for discussion.  
4.2 Discussion on relative value of fundraising activities and potential suitability for future is coordinated.  
4.3 Results and review are submitted to group management committee for noting, recording and further action. |
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>By discussing, coordinating fundraising activities at meetings or formally in writing with clients and stakeholders.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Coordinating fundraising activities will require information to be gathered from external sources and organised for effective outcomes.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Coordinating fundraising activities requires extensive program planning and organising of others.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Coordinating fundraising activities will require development and management of teams to achieve outcomes.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical techniques in relation to budgets for management of costs, basic money/cash handling and recording of expenses and income can be applied.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>While coordinating fundraising activities organisational problems may arise requiring innovative solutions.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be required to communicate with others and manage money.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Who might the community group include? Community groups formed to further conservation or environmental objectives, under the National Heritage Trust, independently, or associated with the operation of a park/reserve.
### What are fundraising activities?

Activities with the potential to provide a source of funds for the group's operation, from the group members, contacts of the group members, or from the wider community; activities seeking donations, payment for goods and services provided; funds from social activities such as local events, stalls, and large scale community events; and activities combined with promotion or sponsorship at community events to promote group, projects and/or program.

### What are potential fundraising activities?

Those within the resources of the group to run; those which are permitted by laws or agreements that the group has signed to complete, projects, and sponsorship agreements.

### What could the views of individuals include?

Personal, ethical, cultural, and/or preferences and willingness to provide resources, support, and/or participation.

### What does net income/results mean?

Net income is after expense/costs of activity have been deducted; results include net income plus an additional promotion or resources provided by the activity.

### What is meant by group practices?

Normal procedures used by the group to determine a course of action in a committee meeting, general meeting, or informal meeting.

### What may be included in Public Safety, OHS, legislative and local government requirements?

Hazard identification, risk assessment, establishing approach to control risks, obtaining permits, submitting for approval proposals for activities.

### What does cash handling include?

Taking, checking, storing, and banking of money received in cash or other tender.

### What forms of literacy are included?

Maintenance of records of activity, financial records, rental/hiring agreements, and development of promotional material for the activity.

### What forms of communication may be relevant?

Development of ideas and enthusiasm in group, presentation of ideas to group and committee, obtaining consents and support from general community, and deal with people who have strong opinions/characters.
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in coordinating fundraising activities requires evidence that fundraising activities have been effectively and appropriately coordinated according to community and agency guidelines, and best practice procedures. The skills and knowledge required to coordinate fundraising activities must be transferable to a range of work environments and contexts. For example, this could include different community groups, programs and fundraising activities.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Network to seek ideas.
- Group practices/protocols.
- Scope of acceptable activities within various cultures/groups in the community.
- Budgets for management of costs.
- Basic money/cash handling and recording of expenses and income.
- Summarising results of activities.
- Basic financial statements.
- Public safety.
- Occupational health and safety approaches and procedures.
- Relevant local government by-laws.
- Permits required for some fundraising activities.
- Meeting procedures.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Presentation of ideas at meetings.
- Approach and enlist support of volunteers.
- Coordinate committees/teams.
- Negotiate for sites and resources.
- Plan and coordinate activities.
- Implement general risk management.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3813A Coordinate social events to support group purposes

Unit Descriptor
This competency standard covers the process of coordinating social events in the context of a workplace or a community group, as a vehicle to create community interest and/or promote a program. It requires the ability to facilitate small ad-hoc groups to complete activities, coordinate group officers to perform appropriate roles in events, plan and follow-up tasks to be completed for event. Coordinating social events to support group purposes requires knowledge of resources available in the community, costing for events, basic money handling and group financial procedures, and community views and cultures.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Plan social events
   1.1 Place of social events within group's activities is identified to ensure contribution to group goals.
   1.2 Group members' preferences for activities and frequency are obtained to obtain their support.
   1.3 Concept, timing and resources required for social event are developed in cooperation with others to suit members' wishes and any community involvement.
   1.4 Community views and safety issues are reviewed to ensure risk to group image and public safety is managed.
   1.5 Social event is promoted to members and relevant section of the community.
   1.6 Personnel and required resources are coordinated for availability at social event.

2. Coordinate activities
   2.1 Location of social activity is prepared to cater for activity and people.
   2.2 Coordination between people assisting in the social event is facilitated to provide a pleasant environment consistent with purpose of activity.
   2.3 Availability of resources is checked to ensure event will occur as planned.
   2.4 Shortages in personnel and resources are managed to minimise impact on social event.
   2.5 Visitors to events and members are welcomed and introduced to others to develop positive social environment.
   2.6 Personnel are coordinated to restore location of social activity to its original condition.
   2.7 Members' opinions of event are obtained to determine whether event should be repeated or altered.
**KEY COMPETENCIES**

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Verbal and written communications occurs at committee meetings, through fliers and media articles advising of the event.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information gained in coordinating social events can be recorded onto a database and/or filed in a paper-based system, and may need to be used to support submissions for additional events and funding.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Through consultation with representative groups and committees with an interest in the social event.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Through organisation of social events with others stakeholders and/or committee members.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>In the estimating, purchasing and organisation of materials and equipment for social events, and in management of budgets and funds.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>By dealing with unforeseen situations that may arise in the planning or conduct of a social event.</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>In the keeping of records, and use of electrical/electronic equipment at social events.</td>
<td>1</td>
</tr>
</tbody>
</table>

**RANGE STATEMENT**

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this unit of competency. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

**For what purposes might social events be held?**

Promotion of group, project and programs to community, attract new members, celebrate event, develop group cohesiveness, and provide occasion for dignitary to meet members and community.

**What form may group goals take?**

They may be formal or informal.
<table>
<thead>
<tr>
<th>What sorts of resources might be relevant to this unit?</th>
<th>Equipment, such as barbecues, cooking equipment and utensils, refrigeration or ice cooling, seating, amplification, marquees or other shelter, food, displays and promotional materials.</th>
</tr>
</thead>
<tbody>
<tr>
<td>What might constitute the community?</td>
<td>Town, village, regional area, suburb or group of suburbs in a city or coastal region.</td>
</tr>
<tr>
<td>What might be included in community views?</td>
<td>Community cultures and beliefs, community viewpoints on activities, suitable locations, size of activities, and age ranges and sexes of people attending.</td>
</tr>
<tr>
<td>Which aspects of safety may be considered?</td>
<td>Public safety and occupational health and safety.</td>
</tr>
<tr>
<td>How might the event be promoted?</td>
<td>Personal or group or invitation from chairperson, circulars through community or community groups, formal invitation, with or without charge and through the media.</td>
</tr>
<tr>
<td>Who are the personnel that might be included?</td>
<td>Paid personnel, contract caterers and volunteers.</td>
</tr>
<tr>
<td>What could be included to minimise impact?</td>
<td>Changing event sequence or timing, obtaining supplementary or alternative resources, and catering for changed weather conditions.</td>
</tr>
<tr>
<td>How could communication be used in this unit?</td>
<td>Developing consensus of opinion, obtaining 'volunteers' to take responsibility for part of activities, welcoming people at activity, introducing people and obtaining opinions.</td>
</tr>
<tr>
<td>How might literacy be useful?</td>
<td>In developing plans and promotional materials.</td>
</tr>
</tbody>
</table>
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in coordinating social events to support group purposes requires evidence that a social event has been successfully planned and that activities have been appropriately coordinated for a community group and event. The skills and knowledge required to coordinate social events to support group purposes must be transferable to a range of work environments and contexts. For example, this could include different types of events, community groups and locations.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Basic catering requirements.
- Resources available in the community.
- Basic costing for events.
- Basic money handling and group financial procedures.
- Resources required for different types of events.
- Negotiation of arrangements with caterers, hotels and clubs.
- Hiring and borrowing equipment.
- Group goals and aim of events.
- Community views and cultures.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Facilitate small ad-hoc group to complete activities.
- Coordinate group officers to perform appropriate roles in events.
- Timely plan and follow-up tasks to be completed for event.
- Use social skills and etiquette.
- Manage any conflict.
- Serve customer.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
### RTD3814A Present proposed courses of action to meeting

#### Unit Descriptor
This competency standard covers the process of providing formal or semi-formal presentations to a meeting to obtain consent for a course of action or as part of a program submission. It requires the ability to seek information from sources of knowledge and advice, develop solutions on own or in small groups, design a course of action and documentation and present recommendations to a meeting. Presenting proposed courses of action to meeting requires a knowledge of sources of knowledge and advice appropriate to submission, structure for presenting reasoned submissions, basic costing and cost/benefit analysis and cultural viewpoints in the community.

#### Unit Sector
No Sector Assigned

### ELEMENT PERFORMANCE CRITERIA

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Develop course of action and documentation | 1.1 Course of action related to **goal**, **action strategy**, **project** or issue is identified to solve a problem or to advance the group.  
1.2 Alternative courses of action are identified and compared to proposed course of action to find best alternative.  
1.3 Known **legislative and ethical requirements** and **diverse viewpoints** are identified for inclusion in course of action.  
1.4 Reason(s) for proposed course of action are identified including costs and benefits, for inclusion in presentation. |
| 2. Present recommendation(s) | 2.1 Recommendations are presented to **committee** with reasons for approval.  
2.2 Reasons for selection of preferred course of action over alternatives are presented to committee as required for its consideration. |
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>By presenting proposed courses of action to meeting.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Presenting proposed courses of action to meeting will require information on goals and strategies to be gathered organised for meetings.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Presenting proposed courses of action to meeting requires some planning and organising of information and others.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Presenting proposed courses of action to meeting will require coordination of self and others in a team.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical techniques such as basic costing and cost/benefit analysis could be applied.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>While presenting proposed courses of action to meeting technical, organisational and cultural problems may arise requiring complex solutions.</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be required to prepare and deliver information for meetings.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What goal, action strategy might be included in this standard?

Goals related to broad objectives of group, action strategy relates to broad set of actions agreed to by group to achieve goals.

What is meant by the term project?

Discrete series of actions leading to defined outcome(s), which are eligible for funding under a relevant program or for which private funding may be sourced.

Which legislative or ethical requirements may be relevant to this standard?

Those related to program or course of action, including fair dealing, handling of contentious issues or strong opinions.
### From where may diverse viewpoints come?
Cultural or community sector background, e.g., indigenous peoples, migrants and women.

### What is the committee?
Committee of management of the group or sub-committee.

### How could the context of the proposal be described?
Development of small proposal on own, development of large proposal as member of a sub-group and demonstrating input at each stage of submission.

### What forms of communication may be relevant?
Promote elections and provide explanations to individuals and group on procedures.

### What levels of literacy are included?
Read association/group rules and count ballot papers.

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#### EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in presenting proposed courses of action to meeting requires evidence that a course of action has been properly prepared and presented to a meeting according to community and agency guidelines and best practice procedures. The skills and knowledge that are required to present a proposed course of action to meeting must be transferable to a range of work environments and contexts. For example, this could include different community groups, actions, presentation techniques and community programs.

### What specific knowledge is needed to achieve the performance criteria?
Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Sources of knowledge and advice appropriate to submission, e.g., library, coordinator/leader etc.
- Structure for presenting reasoned submissions.
- Basic brainstorming techniques.
- Basic costing.
- Basic cost/benefit analysis.
- Cultural viewpoints in the community.

### What specific skills are needed to achieve the performance criteria?
To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Seek information from sources of knowledge and advice.
- Develop solutions on own or in small groups.
- Develop course of action and documentation.
- Present recommendations to a meeting.
Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3815A Represent group at functions

Unit Descriptor
This competency standard covers the group promotional activity of representing group in community or to another group. It requires the ability to speak publicly and make presentations to small groups. Representing a group at functions requires knowledge of program, group and projects (current and planned), sources of further information, social norms and local cultural expectations for different community groups.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Represent group
   1.1 Group is represented at meetings to promote its image.
   1.2 Dress and decorum complies with social expectations to present a positive group image.
   1.3 Information is provided to individuals inquiring about the group.

2. Make presentations
   2.1 Short presentations are made to promote group and respond to other groups.
   2.2 Information provided in presentations and to individuals is relevant, accurate and positive.
KEY COMPETENCIES
What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Through verbal and written approaches before and after functions, and presentations at functions.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Through recording in notes books, keeping a diary, collecting personal/business cards and maintenance of electronic/paper-based database of stakeholders and/or clients.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>According to enterprise guidelines and protocols, requests from and expectations of those responsible for functions.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>In the joint preparation and delivery of presentations at functions.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>In collecting and analysing data for use in presentations.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>In dealing with unforeseen problems arising from difficulties in attending functions and with the delivery of presentations.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>In use of microphones, PowerPoint and/or overhead projectors, in the delivery of presentations.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT
The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which types of meetings may be included? Community meetings, regional meetings, school meetings and meetings between groups to plan social and community events.

What is meant by the term social expectations? Degree of formality or informality, purpose of meeting, media presence, presence of dignitaries, social norms and diverse cultures, backgrounds and perspectives, and cultural expectation of individuals and groups present.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What sort of information may be relevant in this standard?</td>
<td>About the program, group, projects, about environmental/conservation issues at general and local levels to range of people in community, e.g. adults, business people, potential sponsors, children, tertiary students, tourists, and it may be purely verbal or include written information such as brochures, plans and invitations to activities.</td>
</tr>
<tr>
<td>What types of speeches may be included?</td>
<td>Formal prepared short speeches, 'off the cuff' short speeches and responses, ad-hoc responses, informal answers to questions in a public, school or community setting, in business or regional meetings, all of which should comply with social expectations and diverse cultures, backgrounds and perspectives.</td>
</tr>
<tr>
<td>What could be included in the program?</td>
<td>Commonwealth Government community programs under the Natural Heritage Trust, Rural Industry Programs, Business Programs and State Government community programs related to the environment.</td>
</tr>
<tr>
<td>What is meant by the project?</td>
<td>Discrete series of actions leading to defined outcome(s) which are eligible for funding under a relevant program, or for which private funding may be sourced.</td>
</tr>
<tr>
<td>What levels of literacy are included?</td>
<td>Research and interpret general and specific information on program, environmental issues and projects.</td>
</tr>
<tr>
<td>What forms of communication may be relevant?</td>
<td>Seeking information from group and other coordinators and leaders, one-to-one and small group presentation to different community members, public speaking to a range of audiences, and handling contentious issues with sensitivity to diverse viewpoints.</td>
</tr>
<tr>
<td><strong>EVIDENCE GUIDE</strong></td>
<td></td>
</tr>
<tr>
<td>What evidence is required to demonstrate competence for this standard as a whole?</td>
<td>Competence in representing group at functions requires evidence that a group has been appropriately represented at a function and that a short speech or presentation has been delivered according to community and agency guidelines and best practice procedures. The skills and knowledge required to represent group at functions must be transferable to a range of work environments and contexts. For example, this could include different functions, community groups and programs.</td>
</tr>
<tr>
<td>What specific knowledge is needed to achieve the performance criteria?</td>
<td>Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:</td>
</tr>
<tr>
<td></td>
<td>• General knowledge of program, group and projects (current and planned) and sources of further information.</td>
</tr>
<tr>
<td></td>
<td>• Social norms and local cultural expectations for different community groups.</td>
</tr>
</tbody>
</table>
What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Speak publicly.
- Make presentations to small groups.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTD3816A Service committees

Unit Descriptor

This competency standard covers the process of organising meetings for committees and sub-committees at the group and regional levels to support the operation of community groups. It requires the ability to use office equipment, take notes at meetings, plan events, communicate with committee members and manage simple budgets. Servicing committees requires knowledge of meeting procedures, local facilities for meetings, local arrangements for authorising expenditure, local community activities and office and related business procedures.

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Organise meetings
   1.1 Purpose of meeting(s) is clarified with the chair, secretary or coordinator.
   1.2 Schedule of meetings is prepared and maintained in line with any group, regional and/or agency requirements.
   1.3 Venue and date of meeting is organised according to meeting schedule, group or regional requirements and within any budget constraints.
   1.4 Participants are advised of any changes to original meeting details.
   1.5 All appropriate individuals are advised of details of meetings and followed up for confirmation of attendance according to instructions.
   1.6 Any apologies are accepted and accurately recorded for presentation at meeting.
   1.7 Meeting room is set up in a timely manner to suit arrangements and according to instructions.

2. Prepare business papers for meetings
   2.1 Notice of meeting and agenda are accurately prepared to instructions and details provided.
   2.2 Reports required for meeting are prepared or collated as appropriate.
   2.3 All business papers are distributed to appropriate individuals following established group or regional meeting guidelines.

3. Record and produce minutes of meeting
   3.1 Notes are taken of meeting activities and decisions to ensure an accurate record of meeting.
   3.2 Minutes of the meeting are produced in required format to provide an accurate account of meeting.
   3.3 Minutes are checked for accuracy, approved and distributed to instructions.

4. Follow up after meetings
   4.1 Action lists on work following from meetings are prepared according to instructions.
   4.2 Requests for information from group members or officers are dealt with promptly and accurately.
   4.3 Correspondence associated with meetings is dealt with in a timely manner according to instructions.
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>By discussing verbally or in writing committee servicing requirements with supervisors and others.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Servicing committees will require basic information to be gathered and organised accordingly.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Servicing committees requires some planning and organising of people and resources external to the organisation.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Servicing committees will require coordination of self and others in a team.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Basic mathematical techniques could be applied.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>While servicing committee's technical problems may arise requiring simple solutions.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be required to prepare information for members of committees.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Who might the chair, secretary or coordinator be?

Office holders organising the meeting, - the person planning the meeting may be one of these or additional administration support.

What are the group, regional or agency requirements that may be included?

To manage group or projects or manage regional activities according to program and/or contractual requirements and according to agency.

What might the venue requirements include?

Standard of venue, catering arrangements, presentation facilities, seating arrangements, associated facilities such as breakout rooms, dining areas etc., number of participants and special requirements.
How might the instructions be given? They may be informal or formal arrangements covering meeting planning, notice of meeting, minute taking, distribution of documents, follow-up, correspondence and they may be in the form of procedures, notes, verbal or understood from prior procedures.

What could be the nature of meetings? Group management meetings, group general or annual meetings, training/extension sessions, sub-committee meetings related to a project or other specific activity, regional meetings for coordination or for management of regional plan and agency related meetings associated with management of program.

What could be included in the program? Commonwealth Government community programs under the Natural Heritage Trust, Rural Industry Programs, Business Programs and State Government community programs related to the environment.

What are the projects that might be included? Separate project activity funded under program for specific purposes which may require separate accounts and accounting records, and regular reporting may be required on project basis.

Who might the agency be? Commonwealth, State or Territory department or authority managing a program.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in servicing committees requires evidence that committees have been effectively and efficiently serviced according to community and agency guidelines and best practice procedures. The skills and knowledge required to service committees must be transferable to a range of work environments and contexts. For example, this could include different committees, communities and groups.

What specific knowledge is needed to achieve the performance criteria? Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Meeting procedures, both formal and informal.
- Agency guidelines where applicable or instructions.
- Relevant program and incorporation requirements for group where applicable.
- Local facilities for meetings.
- Local arrangements for authorising expenditure.
- Local community and activities.
- Office and related business procedures.
- Occupational health and safety and public safety requirements.
| What specific skills are needed to achieve the performance criteria? | To achieve the performance criteria, some complementary skills are required. These skills include the ability to:  
- Use office equipment, such as computers, photocopiers and facsimiles.  
- Take notes at meetings.  
- Plan events.  
- Communicate.  
- Negotiate basically.  
- Manage simple budgets. |
| Are there other competency standards that could be assessed with this one? | This competency standard could be assessed on its own or in combination with other competencies relevant to the job function. |
| Essential Assessment Information | For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package. |
RTD3817A Propose appropriate uses of traditional customs

Unit Descriptor

This competency standard covers the use of traditional customs for Indigenous people in caring for country. It requires the ability to identify the role of traditional customs in Indigenous communities, outline impact of native title rights and interests recognised under non-Indigenous law, and propose appropriate applications of traditional customs. Proposing appropriate uses of traditional customs in caring for country requires knowledge of cultural customs and heritage, relevant state land and resources acts/legislation and legal representatives' roles.

Note: Delivery and assessment against this competency standard must comply with community protocols and guidelines and be supported by elders and custodians of country.

Unit Sector

No Sector Assigned

ELEMENT PERCENTAGE CRITERIA

1. Identify the role of traditional customs in Indigenous communities

1.1 Specific impacts of traditional customs on a local community are investigated.

1.2 The impact of role delineation of Indigenous men and women on land management practices is defined according to community protocols.

1.3 Current customs are compared with those of pre-European settlement to determine any impacts on the management of country.

2. Outline impact of native title rights and interests recognised under non-Indigenous law

2.1 Implications of the potential conflict of interest between people exercising their native title rights, which are in contravention of non-Indigenous law, are investigated.

2.2 Instances where people exercising their native title rights are contained within non-Indigenous law are outlined.

2.3 The limitations placed on the exercise of native title rights and interests by other valid grants of title under non-Indigenous law, and how these different rights and interests in land might coexist are determined.

2.4 The implications of the potential conflict of interest between the exercise of native title rights and interests and the rights of others with interests in land are assessed.

2.5 Ramifications of the outcomes of practicing traditional customs and native title are discussed.

3. Propose appropriate applications of traditional customs

3.1 Situations involving traditional customs or native title which result in ethical implications in carrying out responsibilities, are identified.

3.2 The use of traditional customs as an alternative to or in conjunction with mainstream legal and management systems is outlined.

3.3 Advice for legal representatives regarding the integration of traditional customs and mainstream legal and management systems is outlined.
KEY COMPETENCIES
What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>By discussing traditional caring for country customs with appropriate people and others.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Proposing appropriate uses of traditional customs in caring for country will require information to be gathered from appropriate people and organised for groups and organisations.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Interviews need to be organised and arranged through appropriate parties.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Proposing appropriate uses of traditional customs in caring for country will require participation with relevant community and others in a team.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Not required.</td>
<td>-</td>
</tr>
<tr>
<td>Solving problems</td>
<td>While proposing appropriate uses of traditional customs in caring for country, technical problems may arise requiring simple solutions.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Not required.</td>
<td>-</td>
</tr>
</tbody>
</table>

RANGE STATEMENT
The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

Which areas of traditional customs could be included?
Indigenous rights to natural and cultural resources and their uses.
Indigenous understandings about country for certain groups.
Indigenous means for dealing with abuse of rights and understandings about country.
Indigenous means for dealing with enforcement of the rights and understandings about country.
Indigenous means for solving problems or issues associated with use of natural and cultural resources on country.
What are the Native Title rights and interests which may be included?

Rights encompassed in territory, state and federal legislation - *Native Title Act 1993 and Native Title Amendment Act 1998*, and the understanding by own people of obligations, responsibilities and abilities to undertake activities based on their traditional customs, regardless of them being contained in legislation.

What ethical implications may apply to this standard?

Conflicts between values and belief systems.
Regulations or by-laws in carrying out their traditional activities.
Dilemmas for enforcement of legislation for self or others in the community.
Disputes within family over work role and traditional roles, especially in regard to enforcement of laws or by-laws.
Dilemmas in respect for elders and traditional owners.
Respect for own work role and responsibilities.

**EVIDENCE GUIDE**

What evidence is required to demonstrate competence for this standard as a whole?

Competence in appropriate uses of traditional customs requires evidence that knowledge of and skills in traditional customs are appropriately held, and that have been used in caring for country according to community protocols. The skills and knowledge required to uses of traditional customs in caring for country must be transferable to a range of work environments and contexts. For example, this could include different traditional customs and practices and areas of country.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Cultural customs and heritage.
- Relevant state land and resources acts/legislation.
- Legal representatives roles.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Discuss matters relating to traditional customs with the appropriate people according to community protocols.
- Appropriately discuss gender roles in ways that do not offend any appropriate people.
- Analyse general situations in regard to interaction of mainstream law and management with traditional customs.
- Speak to persons with significant professional training in law.
- Carry out basic investigative research on areas of use of traditional customs.
- Observation of protocols for entry to traditional lands.
| **Are there other competency standards that could be assessed with this one?** | This competency standard could be assessed on its own or in combination with other competencies relevant to the job function. |
| **Essential Assessment Information** | For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package. |
### RTD3903A Work in an Indigenous community or organisation

**Unit Descriptor**

This competency standard covers the process of operating within an Indigenous community or organisation while demonstrating an awareness of Aboriginal and Torres Strait Islander identity, history and spirituality. It requires the ability to gather information about Indigenous and non-Indigenous social structures, summarise actions of governments to deal with the effects of European colonisation, outline responses of Indigenous peoples and operate within an Indigenous community or organisation. Working within an Indigenous community or organisation requires knowledge of Indigenous communities and social structures, cultural customs and heritage, and the history of dispossession in Australia.

Note: Delivery and assessment against this competency standard must comply with community protocols and guidelines and be supported by elders and custodians of country.

**Unit Sector**

No Sector Assigned

### ELEMENT PERFORMANCE CRITERIA

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gather information about Indigenous and non-Indigenous social</td>
<td>1.1 Major characteristics of the social structures of Aboriginal and Torres Strait Islander societies are determined.</td>
</tr>
<tr>
<td>structures</td>
<td>1.2 Main characteristics of the social structure of British society (1770-1790) are defined.</td>
</tr>
<tr>
<td></td>
<td>1.3 Impacts on Indigenous social structures following European colonisation are identified.</td>
</tr>
<tr>
<td></td>
<td>1.4 Examples of resistance to European colonisation are recorded.</td>
</tr>
<tr>
<td></td>
<td>1.5 Positive and negative effects of European colonisation are documented.</td>
</tr>
<tr>
<td>2. Summarise actions of governments to deal with the effects of European</td>
<td>2.1 Major legislation and/or policy directions of governments that affect Aboriginal and Torres Strait Islanders are identified.</td>
</tr>
<tr>
<td>colonisation on Indigenous people</td>
<td>2.2 Legal parameters relating to Indigenous land ownership, acquisition and management are defined.</td>
</tr>
<tr>
<td></td>
<td>2.3 Impacts of laws and/or policies on social structures of Indigenous peoples are documented.</td>
</tr>
<tr>
<td>3. Outline responses of Indigenous peoples</td>
<td>3.1 Responses by communities relating to social impacts of European colonisation are identified.</td>
</tr>
<tr>
<td></td>
<td>3.2 Influences and trends affecting Indigenous peoples responses are determined.</td>
</tr>
<tr>
<td></td>
<td>3.3 The source of influences and trends affecting Indigenous peoples responses is identified.</td>
</tr>
<tr>
<td></td>
<td>3.4 Positive responses for the maintenance of Indigenous peoples' culture and/or growth of culture are recorded.</td>
</tr>
<tr>
<td></td>
<td>3.5 Personal responses to these trends are related.</td>
</tr>
<tr>
<td>4. Operate within an Indigenous community or organisation</td>
<td>4.1 Cultural protocols are observed according to community and/or organisational guidelines and procedures.</td>
</tr>
<tr>
<td></td>
<td>4.2 Community traditions and customs are respected and reflected in workplace policies and procedures.</td>
</tr>
</tbody>
</table>
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Communication of ideas and information can be applied orally, in written and electronic formats.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information can be collected, analysed and organised through local area oral history, historical records and current references.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Activities can be planned and organised according to community and organisational guidelines and best practice procedures.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Teamwork can be applied through working within an Indigenous organisation or community.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical ideas and techniques can be applied through completion of mathematical tasks required by Indigenous organisation or community.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problem solving skills can be applied through assessing impact of European colonisation on social structures.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>The use of technology can be applied through accessing and recording information on computer.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this competency standard. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

What does colonisation refer to in this standard? Invasion, settlement, assimilation and integration.

What characteristics of social structures described in terms of main elements may be included? Communal living arrangements, patterns of daily life, roles of men, women and children, class structures, predominant language used, main economic activities, main transport systems used, main information systems used, predominant religion or spiritual beliefs, main system of law and order, main type of government, main social upheavals experienced over specified periods of time and main problems experienced by the society over specified periods of time.
**What may be included in resistance to European colonisation?**

Aggressive actions undertaken by Indigenous people, passive actions undertaken by Indigenous people and passive actions by both Indigenous and non-Indigenous people.

**Which legislation could apply to this standard?**


**What policy directions of governments related to Indigenous people may be included?**

Colonisation, protectionism, assimilation, integration, self-determination, self-management and reconciliation.

**What are the major influences or trends and issues which may be relevant?**

Health, housing, land rights, schooling, education, employment, Reconciliation, National Inquiry into the Removal of Children, or any of the directions/policies described above.

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**EVIDENCE GUIDE**

What evidence is required to demonstrate competence for this standard as a whole?

Competence in working within an Indigenous community or organisation requires evidence that there is an awareness of Aboriginal and Torres Strait Islander identity, history and spirituality and that is reflected in work undertaken with Indigenous communities and/or organisations. The skills and knowledge required to apply understanding of Aboriginal and Torres Strait Islander identity, history and spirituality must be transferable to a range of work environments and contexts. For example, this could include different communities and organisations.

**What specific knowledge is needed to achieve the performance criteria?**

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Indigenous communities and social structures.
- Indigenous cultural customs and heritage.
- History of British society and dispossession in Australia.
- Indigenous history and impact of European colonisation.
What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Gather information about Indigenous and non-Indigenous social structures.
- Summarise actions of governments to deal with the effects of European colonisation.
- Outline responses of Indigenous peoples.
- Operate within an Indigenous community or organisation.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTC1006A Support nursery work

Unit Descriptor
This competency standard covers the process of supporting work carried out in wholesale or retail nurseries while under supervision. It requires the ability to prepare materials, tools and equipment for nursery work, undertake nursery work activities, store and stockpile materials, and clean up on completion of work. Supporting nursery work requires knowledge of safe work practices, nursery hygiene and quality control, nursery plant maintenance activities, basic stock control procedures, and propagation techniques.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare materials, tools and equipment for nursery work
1.1 The required materials, tools and equipment are identified according to lists provided and/or supervisor's instructions.
1.2 Checks are conducted on all materials, tools and equipment, with insufficient or faulty items reported to the supervisor.
1.3 Techniques used when loading and unloading materials demonstrate correct manual handling, and minimise damage to the load and the vehicle.
1.4 Suitable personal protective equipment (PPE) is selected and checked prior to use.
1.5 Nursery support is provided according to OHS requirements and workplace information.
1.6 OHS hazards are identified and reported to the supervisor.

2. Undertake nursery work as directed
2.1 Instructions and directions provided by supervisor are followed, and clarification sought when necessary.
2.2 Nursery work is undertaken in a safe and environmentally appropriate manner according to nursery guidelines.
2.3 Interactions with other staff and customers is carried out in a positive and professional manner.
2.4 Nursery policy, procedures and OHS requirements in relation to workplace hygiene practices, handling and disposal of materials is observed.
2.5 Problems or difficulties in completing work to required standards or timelines are reported to supervisor.

3. Store and stockpile materials
3.1 Plant debris and waste material produced during nursery activities are stored according to supervisors instructions.
3.2 Plant debris and waste materials are prepared and processed in an appropriate and safe manner according to supervisor's instructions.
3.3 Surplus materials are stockpiled for removal according to supervisor's instructions.
3.4 A clean and safe work site is maintained while completing nursery activities.
4. Clean up on completion of nursery work

4.1 Plants and materials are stored according to supervisor's instructions and OHS requirements.

4.2 Tools and equipment are cleaned, maintained and stored according to manufacturers specifications and supervisors instructions.

4.3 Work outcomes are reported to the supervisor.

KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information about the job, tasks and problems should be discussed with other members in the work team and the supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Workplace and supervisors instructions should be located, interpreted and applied with further clarification sought as necessary.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Discussions with the supervisor and other team members may be required in order to complete tasks efficiently and safely in a logical sequence and in a timely manner.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Good communication and co-operation with other staff in completing nursery tasks.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Skills in counting, tallying and estimation are required when handling plants or other nursery materials.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems will require corrective action or consultation with supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be applied in the use of nursery equipment and communication systems.</td>
<td>1</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

<table>
<thead>
<tr>
<th>What tasks may be included under nursery work?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assisting with the display of nursery products (e.g., plant, goods and supplies) including unpacking, placing where directed, replenishing as required, preparing and placing price tickets, labels and other display materials.</td>
</tr>
<tr>
<td>• Provide nursery plant care including watering, weeding, removing dead materials, staking, trimming, and potting on of plants as directed.</td>
</tr>
<tr>
<td>• Load and unload nursery stock including preparing stock for dispatch, and checking stock on receipt or at dispatch against documentation.</td>
</tr>
<tr>
<td>• Supporting propagation activities including assisting with preparing planting media, collecting propagating materials, and blocking up plants in correct patterns and spacing.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What instructions may be relevant to this standard?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructions may include Standard Operating Procedures (SOPs), company policy and procedures in regard to product merchandising and displays, specifications, work notes, Material Safety Data Sheets (MSDSs), manufacturers instructions, product labels, or verbal directions from manager, supervisor, or senior operator.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What tools and equipment may be required for nursery work?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools and equipment may include manual or electronic ticketing/labelling equipment, wheelbarrows, trolleys, motorised trolleys, scissors, cleaning equipment, secateurs, knives, media trays, water spray container, dibblers, and rubbish bins.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What workplace information might be required for this standard?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplace information may include procedures for disposing of waste materials, work instructions or verbal instructions from the supervisor, OHS legislative requirements and relevant Codes of Practice.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What OHS hazards may be associated with nursery support?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazards may include heavy materials and equipment, slippery or uneven surfaces, moving machinery and vehicles, solar radiation, and potential dangers from handling potting media, fertilisers, watering systems, and spider and insect bites.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What are the personal protective clothing and equipment requirements associated with nursery support?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal protective clothing and equipment may include steel capped boots/shoes, overalls, gloves, sun hat, sunscreen lotion, safety goggles, face mask and ear protectors.</td>
</tr>
<tr>
<td><strong>What hygiene practices may apply to this standard?</strong></td>
</tr>
<tr>
<td><strong>What environmental waste disposal considerations may apply to this standard?</strong></td>
</tr>
</tbody>
</table>

**EVIDENCE GUIDE**

What evidence is required to demonstrate competence for this standard as a whole?

Competence in supporting nursery work requires evidence that nursery-related activities have been carried out according to instructions and within the required timelines. The skills and knowledge that are required to support nursery work must be transferable to a different work environment. For example, this could include different work tasks, types of nurseries and supervisors.

| **What specific knowledge is needed to achieve the performance criteria?** | Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below: |
| | • Safe work practices. |
| | • Nursery hygiene and quality control. |
| | • Nursery plant maintenance activities. |
| | • Basic stock control procedures. |
| | • Propagation techniques. |
| | • OHS legislative requirements and Codes of Practice. |

| **What specific skills are needed to achieve the performance criteria?** | To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to: |
| | • Prepare materials, tools and equipment for **nursery work**. |
| | • Undertake nursery work as directed. |
| | • Store and stockpile materials. |
| | • Clean up on completion of nursery work. |

| **Are there other competency standards that could be assessed with this one?** | This competency standard could be assessed on its own or in combination with other competencies relevant to the job function. |

| **Essential Assessment Information** | There is essential information about **assessing this competency standard for consistent performance** and **where and how it may be assessed**, in the Assessment Guidelines for this Training Package. All users of these competency standards must have **access** to both the Assessment Guidelines and the relevant **Sector Booklet**. |
RTC1201A Maintain the workplace

Unit Descriptor

This competency standard covers the process expected of workers as part of the daily routine to maintain a tidy and safe workplace including workshops, depots, tool sheds and planted areas. The work is likely to be under direct supervision with regular checking. Competency is demonstrated by the application of knowledge and skills to a limited range of maintenance tasks and roles. Reporting and recording is undertaken within established routines using methods and procedures that are predictable. There is a specified range of duties and contexts where the choice of actions required is made quite clear by the supervisor.

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Use tools, equipment and machinery

   1.1 Maintenance tools, equipment and machinery are identified, collected and prepared for use according to supervisor's instructions.

   1.2 Unsafe or faulty tools, equipment and machinery are identified and segregated for repair or replacement according to supervisor's instructions.

   1.3 Tools, equipment and machinery are cleaned, maintained and stored according to manufacturers specifications, workplace procedures and supervisors instructions.

2. Maintain a clean and safe workplace

   2.1 Services are located using site plans and in consultation with the supervisor.

   2.2 OHS hazards and environmental implications are identified and reported to the supervisor.

   2.3 Suitable personal protective equipment (PPE) is selected, used, maintained and stored according to best practice.

   2.4 Floors, benches and other flat work surfaces are swept, washed and treated according to supervisor's instructions.

   2.5 Tools, equipment and materials not in use are stored neatly, and waste and used materials are removed and placed in disposal containers according to supervisor's instructions.

   2.6 Maintenance activities are undertaken according to OHS requirements.

3. Maintain structures and workplace surroundings

   3.1 Maintenance requirements of structures and workplace surroundings are identified according to supervisor's instructions.

   3.2 Maintenance of structures and workplace surroundings is undertaken according to supervisor's instructions and OHS requirements.

   3.3 Structural damage and deterioration in the workplace are identified and reported to the supervisor.
## KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information about the workplace, maintenance activities and problems such as OHS concerns should be discussed with other members in the work team and the supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Supervisor's instructions and work documents such as manufacturers service specifications should be interpreted and applied, and further clarification sought when necessary.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Maintenance activities will be planned with regard to the supervisor's instructions, and may require consultation with other team members.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Consultation with others in the team, in seeking clarification of instructions and discussing problems. Coordinating movement of tools, equipment and machinery will contribute to safe, effective and efficient completion of maintenance activities.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical techniques will be applied to the calculation of volumes, application rates and areas, tallying, counting and estimating.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems relating to tools, equipment and machinery, maintenance processes, workplace safety and other team members may arise when maintaining a workplace.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be applied in the preparation, use and maintenance of tools, equipment and machinery.</td>
<td>1</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available.

For more information on contexts, environmental implications and variables for training and assessment, refer to the Sector Booklet.

<table>
<thead>
<tr>
<th><strong>What tools, equipment and machinery may be required to maintain the workplace?</strong></th>
<th>Tools, equipment and machinery may include knives, trowels, handsaws, hand and battery-powered secateurs, hedge trimmers both manual and powered, spades, forks, rakes, hoes, shovels, brooms, wheelbarrows, hand edging tools, 2 and 4 stroke pedestrian and ride-on rotary mowers, cylinder mowers, blower/vacs, pavement sweepers, diesel ride-on mowers and sweepers, turf edging machines, brush-cutters, hoses and hose attachments, cleaning materials and equipment, high pressure air and water cleaners, repair tools, and materials such as nails, screws, solvents and glues.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What services may need to be located?</strong></td>
<td>Services may include water supply, gas, power (electricity), telecommunications, irrigation, stormwater and drainage.</td>
</tr>
<tr>
<td><strong>What OHS hazards may be associated with maintaining the workplace?</strong></td>
<td>Hazards may include disturbance or interruption of services, solar radiation, dust, air and soil-borne organisms, noise, sharp tools and equipment, manual handling, moving vehicles, machinery and machinery parts, uneven surfaces and flying objects.</td>
</tr>
<tr>
<td><strong>What environmental implications may be associated with maintaining the workplace?</strong></td>
<td>Beneficial impacts may result from maintaining tidy work areas, depots and workshops, thus reducing the likelihood of litter blowing or washing into the external environment. By maintaining clean and tidy work surfaces, buildings and structures, using environmentally responsible cleaning agents and work practices, offensive odours, noise and unsightly areas may be reduced. Prompt identification of faulty tools, equipment and machinery for repair will also reduce their continued use, which may create unnecessary noise and particulate emissions. Detrimental impacts on the external environment may result from the generation of excessive noise and run-off of water and cleaning agents from maintenance activities, as well as the failure to promptly segregate waste into disposal containers, process waste materials and keep work areas tidy and free of clutter.</td>
</tr>
<tr>
<td><strong>What personal protective equipment (PPE) may be required to maintain the workplace?</strong></td>
<td>Personal protective equipment may include hat, boots, overalls, gloves, goggles, safety harness, respirator or face mask, face guard, hearing protection, sunscreen lotion and hard hat.</td>
</tr>
<tr>
<td><strong>What disposal containers may be used in maintaining the workplace?</strong></td>
<td>Disposal containers may be segregated for specified toxic waste materials (such as weed seed heads, noxious weeds and toxic chemicals), recyclable materials (such as paper, plastic and metal-based waste), composting waste (such as soft plant materials), reusable materials (such as cloths and containers for washing, woody waste), and returnable materials (such as oils, batteries and chemical containers).</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>What OHS requirements may be relevant to this standard?</strong></td>
<td>OHS requirements may include removal of slip/trip hazards, keeping access ways clear of obstructions, cleaning, maintaining and storing tools, equipment and machinery, appropriate use, storage and maintenance of personal protective equipment including sun protection, drinking to avoid dehydration, safe operation of tools, equipment and machinery, correct manual handling, basic first aid, personal hygiene, identifying and reporting hazards to supervisor, protection of people in the workplace, and protection from hazardous substances, noise, organic and other dusts.</td>
</tr>
<tr>
<td><strong>What structures may require maintenance?</strong></td>
<td>Structures may include buildings, roads, tracks, soil conservation works, trellises, shelters, shade cloth, bird netting, hail netting, glass houses, yards, fences, drying racks, irrigation and drainage systems, covered grounds of bitumen, cement or gravel for vehicle parking or low maintenance care, and enterprise signs.</td>
</tr>
<tr>
<td><strong>What workplace surroundings may require maintenance?</strong></td>
<td>Workplace surroundings may include natural areas of existing or volunteer native plants, and landscaped and/or planted display areas.</td>
</tr>
<tr>
<td><strong>What maintenance of structures and workplace surroundings may be appropriate to this standard?</strong></td>
<td>Maintenance activities may include basic repair work such as tightening or replacing loose fixtures, painting small areas, and replacing depleted surfaces such as gravel and mulch.</td>
</tr>
</tbody>
</table>
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in maintaining a workplace requires evidence that a person is able to perform a limited range of maintenance tasks such as cleaning, tidying and performing minor structural repairs. The skills and knowledge required to maintain the workplace must be transferable to a different work environment. For example, this could include different workplaces, maintenance practices and enterprise procedures and practices.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Enterprise standards for presentation of buildings, structures and surroundings.
- The effect of outdoor climatic conditions (e.g., rain, hail, extreme heat and/or wind, or very high ultraviolet radiation), which may prevent or impede maintenance activities, or influence the selection of tools, equipment and safety equipment to minimise the hazards presented.
- Awareness of the relationship between specific maintenance activities and the external environment, and reasons for procedures that help to minimise the impact that these activities may have on the environment.
- Workplace hazards, OHS legal rights and responsibilities, and OHS safety symbols and signs.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Participate in teams and contribute to team objectives.
- Understand instructions.
- Read labels, site plan measurements and OHS symbols.
- Communicate effectively with team members and supervisor.
- Tally work hours, calibrate tools and equipment, measure volumes to apply cleaning agents, measure quantities of materials and estimate areas.
- Minimise noise, dust and water run-off to prevent nuisance-level environmental disturbance.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.
Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTC1202A
Support landscape work

Unit Descriptor
This competency standard covers the process of supporting landscape work under direct supervision. It requires the ability to prepare materials, tools and equipment for landscaping work, undertake landscaping activities, handle materials and equipment, and clean up on completion of work. Supporting landscape work requires knowledge of safe work practices, landscape construction techniques, landscape tools and equipment, and repair and maintenance of landscape features.

UNIT SECTOR
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare materials, tools and equipment for landscaping work
   1.1 The required materials, tools and equipment are identified according to lists provided and/or supervisor's instructions.
   1.2 Checks are conducted on all materials, tools and equipment with insufficient or faulty items reported to the supervisor.
   1.3 Techniques used when loading and unloading materials demonstrate correct manual handling, and minimise damage to the load and the vehicle.
   1.4 Suitable personal protective equipment (PPE) is selected and checked prior to use.
   1.5 Landscaping support is provided according to OHS requirements and according to workplace information.
   1.6 OHS hazards are identified and reported to the supervisor.

2. Undertake landscape work as directed
   2.1 Instructions and directions provided by supervisor are followed and clarification sought when necessary.
   2.2 Landscape work is undertaken in a safe and environmentally appropriate manner according to enterprise guidelines and OHS requirements.
   2.3 Interactions with other staff and customers are carried out in a positive and professional manner.
   2.4 Enterprise policy and procedures in relation to workplace practices, handling and disposal of materials is observed.
   2.5 Problems or difficulties in completing work to required standards or timelines are reported to supervisor.

3. Handle materials and equipment
   3.1 Waste material and debris produced during landscape work is stored in a designated area according to supervisor's instructions.
   3.2 Materials, equipment and machinery are handled and transported according to supervisor's instructions and enterprise guidelines.
   3.3 A clean and safe work site is maintained while undertaking landscaping activities.
4. Clean up on completion of landscaping work

4.1 Materials are returned to store or disposed of according to supervisor’s instructions and OHS requirements.

4.2 Tools and equipment are cleaned, maintained and stored according to manufacturers specifications and supervisor’s instructions.

4.3 Site is **made good** according to supervisor’s instructions and good environmental and OHS practices.

4.4 Work outcomes are reported to the supervisor.

**KEY COMPETENCIES**

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information about the job, tasks and problems should be discussed with other members in the work team and the supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Workplace and supervisors instructions should be located, interpreted, and applied with further clarification sought as necessary.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Discussions with the supervisor and other team members may be required in order to complete tasks efficiently, in a logical sequence, and in a timely manner.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Good communication and co-operation with other staff in completing landscaping tasks.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Skills in counting, tallying and estimation are required when handling materials, tools and equipment.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems will require corrective action or consultation with supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be applied in the use of landscape tools and equipment.</td>
<td>1</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

What tasks may be included under landscaping work?

- Assisting with construction of landscape features including paths, paving, retaining walls, site structures and furniture, planted areas and irrigation systems.
- Assisting with maintenance of landscape features including watering, weeding, staking, repairing, painting, and cleaning.
- Work with a range of materials including concrete, timber, masonry, stone, metal and plastics.
- Associated landscape activities including assisting in establishing work base, clearing site, erecting barriers and signs, unloading and loading of materials, setting out of works, cleaning up site, and disposal of debris and materials.

What instructions may be relevant to this standard?

Instructions may include Standard Operating Procedures (SOPs), enterprise policy and procedures, specifications, work notes, Material Safety Data Sheets (MSDSs), manufacturers instructions, or verbal directions from manager or supervisor.

What tools and equipment may be required for landscaping work?

Tools and equipment may include levelling equipment, wheelbarrow, concrete mixer, string lines, tape measures, marking gauges, spades, shovels, crow bars, chisels, hammers, spanners, nails, handsaws, hacksaws, metal files sanding blocks, paint brushes, trowels and screeding equipment.

What workplace information might be required for this standard?

Workplace information may include procedures for disposing of waste materials, OHS legislative requirements and Codes of Practice including manual handling, work instructions or verbal instructions from the supervisor.

What OHS hazards may be associated with landscaping work?

Hazards may include, solar radiation, dust, noise, air and soil-borne microorganisms, chemicals and hazardous substances, sharp hand tools and equipment, manual handling, holes, trenches, slippery and uneven surfaces, electricity and overhead hazards including powerlines.

What are the personal protective clothing and equipment requirements associated with landscaping support?

Personal protective clothing and equipment may include steel capped boots/shoes, overalls, gloves, safety harness, sun hat, sunscreen lotion, safety goggles, face mask and ear protectors.
What waste materials may apply to this standard? Plant debris, litter and broken components, mulches, compost, plastic, metal, paper-based materials. These may be recycled, re-used, returned to the manufacturer, or disposed of according to enterprise work procedures.

What may occur when a site is made good? Paths are swept and cleaned, planted areas are checked to ensure they are well presented, damaged turf is replaced/resown, disturbed areas are repaired, all materials, debris, tools and equipment are removed from site, damaged plants are pruned or replaced, and other signs of disturbance or damage are corrected.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole? Competence in supporting landscape work requires evidence that landscaping activities have been carried out according to instructions and within the required timelines. The skills and knowledge that are required to support landscape work must be transferable to different work environments. For example, this could include different landscaping features, work locations and enterprise policies and procedures.

What specific knowledge is needed to achieve the performance criteria? Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Safe work practices.
- Preparing for landscape work and cleaning up on project completion.
- Basic construction techniques.
- Landscaping tools and equipment.
- Maintenance practices for planted areas.
- Repair and maintenance of landscape features.
- OHS legislative requirements and Codes of Practice.

What specific skills are needed to achieve the performance criteria? To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Prepare materials, tools and equipment for landscaping work.
- Undertake landscape work as directed.
- Handle materials and equipment.
- Clean up on completion of landscaping work.

Are there other competency standards that could be assessed with this one? This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.
Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
## RTC1301A Operate basic machinery and equipment

### Unit Descriptor
This competency standard covers the use and maintenance of basic machinery and equipment. Competency requires the application of skills and knowledge to a limited range of tasks including pre-operational checks, and the cleaning and storage of tools and equipment. In addition, competency requires an awareness of workplace safety and positive environmental practices associated with equipment operation. The work in this standard is likely to be under direct supervision with regular checking.

### Unit Sector
Horticulture

### ELEMENT PERFORMANCE CRITERIA

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Prepare basic machinery and equipment for use | 1.1 **Machinery and equipment** are identified and selected in accordance with supervisor's instructions  
1.2 Routine **pre-operational checks** of machinery and equipment are carried out to manufacturers specifications and/or enterprise procedures.  
1.3 Unsafe or faulty machinery and equipment are identified and segregated for repair or replacement in line with enterprise requirements  
1.4 **Occupational Health and Safety hazards** in the workplace are identified and reported to the supervisor |
| 2. Operate basic machinery and equipment | 2.1 Suitable **personal protective clothing and equipment** is selected, used, maintained and stored in accordance with Occupational Health and Safety requirements  
2.2 Machinery and equipment are operated to manufacturers specifications and in accordance with supervisor's instructions  
2.3 Work is completed to supervisor's satisfaction and in accordance with Occupational Health and Safety requirements  
2.4 **Environmental implications** associated with operation and maintenance are identified and reported verbally to the supervisor |
| 3. Check, clean and store basic machinery and equipment | 3.1 Machinery and equipment use is detailed and recorded in accordance with enterprise requirements  
3.2 Machinery and equipment are cleaned, secured and stored to manufacturers specifications and supervisors instructions  
3.3 Malfunctions, faults, wear or damage to machinery and equipment are identified and reported in line with enterprise requirements  
3.4 Workplace areas are cleaned and maintained in line with Occupational Health and Safety and enterprise requirements |
<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>With regard to basic machinery and equipment operation, safety procedures and their application may be discussed with work colleagues or the supervisor</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>With regard to the performance of machinery, equipment, identified faults, and Occupational Health and Safety concerns may be reported for repair and organised by records</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Involving use of basic machinery and equipment may be planned and coordinated around work schedules or sequenced as required</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Team work may be applied in methods and procedures to complete maintenance and job functions to achieve work plan requirements</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Basic mathematical techniques may be applied in the calculation and measurement of volumes, weights and consumption, particularly in relation to pre-operational checks</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Machinery and equipment breakdowns, faults or malfunctions will need to be reported to supervisor for repair or replacement to achieve work plan requirements</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>To communicate, measure and record information with regard to machinery and equipment maintenance, usage and performance</td>
<td>1</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

**Machinery and equipment** may include

- small engine machinery such as
  - mowers
  - brushcutters
  - pumps
  - Gurneys
  - air compressors
  - generators
- equipment such as
  - hand tools
  - wheelbarrows
  - spades
  - shovels and forks
- this unit excludes
  - ride-on machinery
  - electrically powered tools
  - vehicles
  - chainsaws

**Pre-operational checks** on machinery and equipment may include checking

- fuels, fuel lines and oils
- battery electrolyte levels, wheels and tyre pressure
- air filters
- safety guards

preparation on equipment may include

- cleaning, lubricating
- identifying and segregating unsafe or faulty equipment for repair or replacement

**Enterprise requirements**

- Standard Operating Procedures (SOPs), industry standards, production schedules, Material Safety Data Sheets (MSDSs), work notes, product labels, manufacturers specifications, operators manuals, enterprise policies and procedures (including waste disposal, recycling and re-use guidelines), Occupational Health and Safety procedures, supervisors oral or written instructions, work and routine maintenance plans could be included in enterprise requirements
Occupational Health and Safety requirements may include systems and procedures for:

- the safe operation and maintenance of machinery and equipment including guarding of exposed moving parts
- manual handling, including safe lifting and carrying techniques
- handling and storage of hazardous substances, and the appropriate use, maintenance and storage of personal protective clothing and equipment
- outdoor work including protection from solar radiation, hazardous noise and organic and other dusts
- identifying and reporting hazards
- projection of people in the workplace

Occupational Health and Safety hazards associated with equipment operation may include:

- exposure to loud noise and fumes, solar radiation, dust
- ergonomic hazards associated with posture and vibration
- hazardous substances (fuels, oils, fertiliser), oil and grease spills
- the presence of bystanders, livestock and wildlife
- uneven and varying terrain gradients, potholes, ditches, gullies, embankments, obstacles
  - rocks
  - logs
  - fences
  - debris
  - buildings
- extreme weather conditions, electricity, overhead hazards such as
  - powerlines mechanical malfunctions
  - exposed moving parts
  - other machinery including hydraulics

Personal protective clothing and equipment may include:

- boots
- hat/hard hat
- overalls
- gloves
- protective eyewear
- hearing protection
- safety harness
- respirator or face mask
- sun protection, eg, sun hat, sunscreen

Environmental implications associated with the operation of tools and equipment:

- negative environmental impacts may result from excessive noise and exhaust emissions, the incorrect use and disposal of maintenance debris (oil containers, chemical residues), hazardous substances (fuel, fertiliser), and damage to fauna and flora in natural areas
- impacts may also include run-off flows of water and cleaning agents from servicing, maintenance and cleaning activities, soil disturbance and dust problems from high activity traffic (including irrigation equipment)
The sport and recreation industry covers:

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered

- Assessment must confirm sufficient knowledge in the operation of basic machinery and equipment
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's work environment
- In particular, assessment must confirm the ability to
  - select, maintain and utilise a range of machinery and equipment to complete designated work tasks
  - carry out pre-operational checks
  - recognise and report equipment faults and workplace hazards
  - interpret and follow instructions
  - maintain equipment usage records
  - clean, secure and store equipment after use
  - demonstrate a safe workplace and environmentally responsible practices
  - transfer the skills and knowledge required to operate basic machinery and equipment to a different work environment, eg, This could include different machinery, equipment, tools and workplace
Interdependent assessment of units

• This unit must be assessed after attainment of competency in the following unit(s)
  • Nil
• This unit must be assessed in conjunction with the following unit(s)
  • Nil
• For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  • Nil

Required knowledge and skills

• Required knowledge
  • Pre-operational and safety checks for basic machinery and equipment
  • Hazards associated with the operation of basic machinery and equipment
  • Operating principles and operating methods for basic machinery and equipment
  • Procedures for cleaning, securing and storing basic machinery and equipment
  • Risks associated with the operation of machinery and equipment in different weather and difficult terrain conditions
  • Relevant State/Territory legislation, regulations and Codes of Practice with regard to workplace Occupational Health and Safety requirements, and the use and control of hazardous substances
  • Environmental impacts and minimisation measures associated with the operation of basic machinery and equipment
  • Enterprise policies with regard to machinery and equipment use, recording and reporting routines
• Required skills
  • Personal protective clothing and equipment and when and how it should be used, maintained and stored

Resource implications

• Physical resources - assessment of this competency requires access to
  • appropriate documentation and resources normally used in the workplace
  • protective clothing and equipment
  • machinery and equipment
• Human resources - assessment of this competency will require human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
  • be competent in this unit
  • be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
  • have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A
Consistency in performance

- Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable to the work environment.

Context for assessment

- This unit of competency must be assessed in the context of sport or recreation activity. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace.

- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes.

- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
RTC1302A Assist with routine maintenance of machinery and equipment

Unit Descriptor
This competency standard covers the processes required to assist with basic routine maintenance on a range of machinery and equipment. It requires the application of basic skills and knowledge to prepare and use hand and power tools to carry out minor repairs and servicing tasks on machinery and equipment. In addition, competency requires an awareness of workplace safety and positive environmental practices associated with maintenance activities. The work functions are likely to be under direct supervision with regular checking within enterprise guidelines.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare for basic routine maintenance
   1.1 Tools and supplies required to carry out basic routine maintenance tasks are identified, selected and provided on site according to supervisor's instructions.
   1.2 Routine pre-operational checks of machinery and equipment are carried out and adjustments made according to manufacturers specifications and/or enterprise procedures.
   1.3 Faulty or unsafe machinery and equipment are identified and segregated for repair or replacement according to enterprise requirements.
   1.4 OHS hazards in the workplace are identified and reported to the supervisor.

2. Carry out basic routine maintenance
   2.1 Suitable personal protective equipment is stored, selected, used and maintained according to OHS requirements.
   2.2 Greasing, lubrication and other basic servicing of machinery and equipment is carried out according to operators manual/manufacturers specifications and supervisor's instructions.
   2.3 Routine adjustments and repairs are made to machinery and equipment according to operators' manual/manufacturers specifications and supervisors instructions.
   2.4 Work is conducted according to OHS requirements and completed to supervisor's satisfaction.

3. Complete basic routine maintenance activities
   3.1 Tools are cleaned, returned to operating order and stored according to manufacturers specifications and enterprise requirements.
   3.2 Environmental procedures are followed and waste from maintenance activities is collected, treated and disposed or recycled according to enterprise requirements.
   3.3 Work area is cleaned and maintained according to OHS and enterprise requirements.
   3.4 Malfunctions, faults, wear or damage to tools are reported to the supervisor according to enterprise requirements.
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
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<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Information with regard to the operation of tools and application methods may be discussed with the supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information with regard to the performance of machinery and equipment, identified faults and OHS concerns may be reported to the supervisor for repair and organised by records.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Activities involving the cleaning of machinery and equipment and work area may be planned and coordinated around maintenance schedules or sequenced as required.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>In the application of communication, methods and procedures to complete scheduled maintenance tasks, e.g., isolating machinery with danger tags or lockout keys.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Basic mathematical techniques may be applied in the calculation and measurement of volumes and consumption in relation to lubrication requirements.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Faulty tools or malfunctions may be reported for repair and arrangements made for replacement in order to minimise disruption to maintenance schedules.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>To communicate, measure and record information with regard to tools and equipment usage and performance.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables explains the range of contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment may depend on the work situations available.

What tools and supplies may be required to carry out routine basic maintenance?

Hand tools, personal protective equipment, hand held power tools, grease guns, cleaning and maintenance supplies including grease, fuel, oil, chemicals, water steam, power and air.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What may be involved in basic routine maintenance activities?</td>
<td>This may include dismantling and assembling procedures, testing, tightening, minor adjustments and repairs, and routine servicing procedures including lubricating, and checks of cooling system, fuel, grease and oil, and battery levels. It may also include inspections of tyre pressure, fan belts, leads, lines, connections, air filters, air conditioning, brakes, clutch, electrical, gearbox, hydraulics, steering, lighting, transmission, and confirmation of safety guards, PTO stubs and shafts.</td>
</tr>
<tr>
<td>How might supervisor's instructions be communicated?</td>
<td>Instructions may be received by verbal or written communication.</td>
</tr>
<tr>
<td>What may be involved in routine pre-operational checks of tools?</td>
<td>This may include routine safety and pre-start checks and preparatory procedures including cleaning, lubricating, hand sharpening, priming pumps, clearing filters, tightening, basic repairs and adjustments.</td>
</tr>
<tr>
<td>What enterprise requirements may be applicable to this standard?</td>
<td>Standard Operating Procedures (SOPs), industry standards, production schedules, Material Safety Data Sheets (MSDSs), work notes and plans, product labels, manufacturers specifications, operators' manuals, enterprise policies and procedures (including waste disposal, recycling and re-use guidelines), and supervisors oral or written instructions.</td>
</tr>
<tr>
<td>What OHS requirements may be relevant to this standard?</td>
<td>Systems and procedures for:</td>
</tr>
<tr>
<td></td>
<td>the safe maintenance of equipment including hydraulics and guarding of exposed moving parts</td>
</tr>
<tr>
<td></td>
<td>identifying and reporting hazards</td>
</tr>
<tr>
<td></td>
<td>• safe lifting, carrying and manual handling</td>
</tr>
<tr>
<td></td>
<td>• the provision of safety decals and signage</td>
</tr>
<tr>
<td></td>
<td>• the safe handling and storage of hazardous substances</td>
</tr>
<tr>
<td></td>
<td>• the appropriate use, maintenance and storage of personal protective equipment</td>
</tr>
<tr>
<td></td>
<td>• outdoor work including protection from solar radiation</td>
</tr>
<tr>
<td></td>
<td>• working in confined spaces</td>
</tr>
<tr>
<td></td>
<td>• the protection of people in the workplace</td>
</tr>
<tr>
<td></td>
<td>• protection from hazardous noise, organic and other dusts.</td>
</tr>
<tr>
<td>What hazards may be associated with maintenance activities?</td>
<td>This may include exposure to loud noise, exhaust fumes, solar radiation, dust, and hazardous substances. It may also include oil and grease spills, electricity, mechanical malfunctions, exposed moving parts including hydraulics, and overhead hazards such as powerlines.</td>
</tr>
<tr>
<td>What personal protective equipment may be relevant to this standard?</td>
<td>Boots, hat/hard hat, overalls, gloves, protective eyewear, hearing protection, safety harness, respirator or face mask, and sun protection (sun hat, sunscreen).</td>
</tr>
</tbody>
</table>
What range of machinery and equipment may be covered in this standard?

Hydraulic equipment, hydroplats, stationary engines, pumps, irrigation equipment, seeders, harvesters, balers, spraying equipment, hedging machines, solar and wind powered equipment.

What positive environmental procedures may be implemented?

This may include measures to reduce excessive noise and exhaust emissions, the safe use and disposal of maintenance debris including oil containers, fuel and chemical residues. It may also include preventative measures with regard to soil disturbance and increased run-off flows, and damage to natural areas caused by servicing, maintenance and cleaning activities.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in assisting with basic routine maintenance of machinery and equipment requires evidence of the ability to select the correct hand and power tools to complete servicing, adjustment and repair tasks. It also requires the ability to apply task instructions, recognize hazards, test equipment for correct operation, maintain work areas in a clean, tidy and safe condition, and clean and store machinery and equipment after use. Evidence must also be demonstrated in the application of safe workplace and environmentally responsible practices. The skills and knowledge required to carry out basic routine maintenance of equipment must be transferable to a different work environment. For example, this could include different machinery and equipment, workplaces and maintenance procedures.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Types, characteristics and functions of machinery and equipment.
- Machinery and equipment testing and operating procedures.
- Types, characteristics and functions of tools used in maintenance of machinery and equipment.
- OHS legislative requirements.
- Codes of Practice with regard to the use and control of hazardous substances and/or working in confined spaces.
- Environmental Codes of Practice with regard to maintenance activities.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Demonstrate safe and environmentally responsible workplace practices.
- Read and interpret manufacturers specifications, work and maintenance plans, safety decals and MSDSs.
- Measure and calculate volumes, consumption and lubrication requirements.
<table>
<thead>
<tr>
<th>Are there other competency standards that could be assessed with this one?</th>
<th>This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential Assessment Information</td>
<td>There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.</td>
</tr>
</tbody>
</table>
RTC1701A Follow basic chemical safety rules

Unit Descriptor

This competency standard covers the functions of a person working in an enterprise which uses chemicals and who needs to be aware of their use. Skills and knowledge include awareness of the use of chemicals, how they are handled, stored and transported, recognition of safety issues surrounding chemical use, and the ability to use personal protective equipment when instructed. It requires awareness of the duty of care to self, to others, and to the environment concerning chemicals. This person will be under close supervision in the workplace and will be required to follow instructions at all times.

Unit Sector

Horticulture

ELEMENT PERFORMANCE CRITERIA

1. Follow workplace requirements and instructions concerning chemicals
   1.1 Roles and responsibilities of people in the workplace are identified
   1.2 Safety procedures involved in chemical handling and use are recognised and followed as required
   1.3 Occupational health and safety hazards are identified and reported to the supervisor
   1.4 Organisational procedures are followed with regard to chemicals

2. Recognise risks associated with chemicals
   2.1 Functions of chemicals in the workplace are recognised
   2.2 Chemical labels and symbols are recognised and hazards identified
   2.3 Chemical storage locations are identified
   2.4 Instructions for transport, handling and storage of chemicals are recognised and observed
   2.5 Instructions for use, maintenance and storage of personal protective equipment and application equipment are identified and observed

3. Follow chemical handling and storage rules
   3.1 Chemical handling and storage instructions on labels are followed
   3.2 Safety rules are followed when working in areas where chemicals are stored
   3.3 Appropriate personal protection equipment is obtained and used when working in areas where chemicals are stored
   3.4 Procedures are followed in the event of an accident or spillage
KEY COMPETENCIES

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Information about procedures or safety may be communicated in the workplace.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information on labels and Material Safety Data Sheets (MSDSs) may be collected, analysed and interpreted.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Organising activities may not be relevant to this standard.</td>
<td>-</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Working with others when dealing with chemicals.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Interpreting volumes and measurement requirements on labels may require mathematical ideas to be applied.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Action to take in the event of an accident or spillage may require problem solving.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Using relevant personal protection equipment may require the use of technology.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

**What roles and responsibilities may be relevant in the workplace with regard to chemicals?**

Roles will include own role and may include the supervisor, farm manager, team leader, owner or external contractor, and external emergency contact organisations.

**What safety procedures are relevant to this standard?**

Safety procedures may include compliance with safety instruction on the label, information contained in Material Safety Data Sheets (MSDSs) such as use, maintenance and storage of personal protective equipment, first aid, systems of transport, storage and handling, procedures for the protection of environment and protection of others.
### What organisational procedures are relevant to this standard?

Procedures must include storage, transport, mixing, loading, application, emergencies, recording, cleaning and disposal of chemicals.

### What legislation and regulations are relevant to this standard?


### What personal protective equipment may be relevant to this standard?

Equipment may include hats, face shields, goggles, respirators, overalls, aprons, chemical resistant gloves and footwear.

### What application equipment may be relevant to this standard?

Knapsacks or hand held pneumatic sprayers, drench guns and spot on applicators.

### EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Overall competence in this standard requires evidence that a person working in an agricultural or horticultural environment is aware of the use of chemicals in the workplace, why they are used, where they are stored and how they are transported, and the safety requirements for handling chemicals. Evidence must demonstrate the ability to follow instructions and report concerns if unsafe practices, equipment or environmental conditions are observed. The skills and knowledge covered must be transferable to other work environments. For example, a person who has been inducted into the use of chemicals in a particular workplace should be able to transfer that knowledge and skill to another workplace, although different chemicals may be present.

### What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Basic Occupational Health & Safety rules required to work near and around chemicals.
- Level of hazard and the Poisons Schedule in the relevant State or Territory.
- Chemicals being used for the control of pests and weeds.
- Personal protection equipment and when and how it should be used, stored and maintained.
- Correct wearing/fit of personal protective equipment.
- Environmental impacts of chemical use.
What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Communicate information about spillages, accidents or deficiencies in procedures and practice.
- Accurately interpret labels and instructions.
- Follow workplace instructions and directions from the chemical label or Material Safety Data Sheets (MSDSs).

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTC1801A Prepare for work

Unit Descriptor
This competency standard covers the process of preparing to work in an agricultural, horticultural or conservation and land management industry. It requires the ability to observe safe work practices, communicate with others, contribute to a productive working environment, and follow good environmental practices. Preparing to work with plants, animals and/or land requires knowledge of safe work practices, communication procedures, systems and technology, industry expectations of conduct, presentation and work performance, and good environmental practices in the workplace.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Observe safe work practices

1.1 Protective clothing and equipment is used according to best practice when completing work tasks.
1.2 Safety of machines, tools and equipment is checked before use.
1.3 Correct manual handling techniques are used.
1.4 Hazards are reported to supervisor.
1.5 Supervisors are immediately informed verbally when there is an emergency.
1.6 Machines, tools and equipment are operated to manufacturer's specifications and in accordance with supervisor's instructions.
1.7 Safety procedures involved in handling of hazardous substances are interpreted and followed as required.
1.8 Safety procedures to protect people in the workplace are followed.

2. Communicate with others

2.1 Instructions and notices are interpreted correctly and observed.
2.2 Simple messages from clients and customers are taken and passed to supervisor.
2.3 Communication with others is conducted in a courteous manner and is appropriate to age, culture, linguistic background and position in the organisation.

3. Contribute to a productive working environment

3.1 Work practices contribute positively to quality, productivity and conditions, and promote co-operation and good relationships.
3.2 Industry expectations of conduct and presentation are determined and observed.
3.3 Information on working in the industry including employment terms and conditions is collected.
3.4 Work is consistent with workplace standards relating to anti-discrimination and workplace harassment.

4. Follow good environmental practices

4.1 Work practices relating to potential environmental impacts are recognised and followed, and clarification is sought where necessary.
4.2 Environmental threats and potential hazards are recognised and reported to supervisor.
4.3 Contributions are made to improve environmental work practices.
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Through verbal or written communications with others or supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Through observation of instructions and notices, reporting directly to supervisors, and through completion of relevant records.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Working effectively in the industry requires limited planning and organising.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Through participating with others in undertaking work tasks.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Not Applicable.</td>
<td>-</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems requiring simple solutions may arise and should be referred to supervisors for guidance.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology will be used in communications with others.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

What protective clothing or equipment may be required?  
Personal protective equipment (PPE) may include ear, eye and chemical protection, gloves, respirator, safety harness, protective clothing and headgear.

What hazards may be relevant to this competency standard?  
Equipment (including powered tools) and machinery operation and maintenance, vehicles, mechanical malfunctions, exposure to moving parts including hydraulics, noise, chemicals, gases, dust, manual handling, plants and animals, solar radiation, electricity, overhead hazards such as powerlines, water bodies, firearms, explosives, damaged or broken structures, damaged or worn equipment, items blocking exits, items of equipment in areas used for access, poor surfaces, and spillages and breakages.
<table>
<thead>
<tr>
<th>What is included under manual handling?</th>
<th>Moving, lifting, shovelling, loading materials, pulling, pushing, up-ending materials, hand tool use, and handling plants and animals.</th>
</tr>
</thead>
<tbody>
<tr>
<td>What types of instructions and notices may be relevant to this unit?</td>
<td>• Verbal and written directions, notes, messages, rosters, labels, symbols, signs, tables, simple graphs, personnel information, safety material, dockets with customer/client details, enterprise specific data, and industry network details.</td>
</tr>
<tr>
<td>Which forms of communication may be relevant?</td>
<td>Face to face, telephone, written means, computers, e-mail, facsimile, 2-way radio, mobile phone, attendance at industry forums, paging systems and answering machines.</td>
</tr>
<tr>
<td>What conduct and presentation may be relevant to this standard?</td>
<td>Conduct includes safe behaviour when completing work tasks, punctuality, co-operation with others, and in following directions and courtesy towards others. Presentation includes dress requirements for personal safety in the working environment, the wearing or use of personal protective equipment, personal and workplace hygiene, and personal presentation for safety, e.g., the need to cover long hair or remove jewellery.</td>
</tr>
<tr>
<td>What information about the industry may be relevant to this standard?</td>
<td>Different sectors of the industry and the services available in each sector, relationship between sectors and other industries, industry working conditions, legislation and OHS Codes of Practice that affects the industry, industrial relations issues and major organisations, career opportunities within the industry, work ethic required to work in the industry and industry expectations of staff, and quality assurance.</td>
</tr>
<tr>
<td>What employment terms and conditions may be included in this unit?</td>
<td>Workplace agreements, relevant union bodies, relevant awards, employment contracts and workplace requirements and etiquette.</td>
</tr>
<tr>
<td>What environmental threats and potential hazards may be included in this competency standard?</td>
<td>These could include spills, leaks, pollution, planned and unplanned emissions, accidents and disposal of waste, and damage or disruption to ecosystems. Also includes plants, animals or diseases that are classified as a threat or problem in an area, changes in land use, fire risks and threats, and inappropriate human interaction on the environment.</td>
</tr>
<tr>
<td>What contributions to good environmental work practices may be made?</td>
<td>Positive and prompt responses to changes in work practices that help the environment, discussion of environmental issues with fellow workers, reporting to supervisors on observations or information about potential environmental threats, and assistance in maintenance of records.</td>
</tr>
</tbody>
</table>
## EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in preparing to work in an agricultural, horticultural or conservation and land management industry requires evidence that skills and knowledge have been successfully demonstrated in a workplace or equivalent situation. These skills and knowledge required for preparing to work in an agricultural, horticultural or conservation and land management industry must be transferable to a range of work environments and contexts. For example, this could include different workplaces, groups of co-workers, and industry sectors.

### What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Hazards in the industry.
- OHS legislative requirements and Codes of Practice including manual handling and use, maintenance, and storage of protective equipment and clothing.
- Communication procedures, systems and technology relevant to the industry.
- Industry expectations of conduct, presentation and work performance (including quality and productivity).
- Appropriate behaviour relating to anti-discrimination and sexual harassment.
- Industry employment terms and conditions and career pathways.
- Good environmental practices in the workplace.
- Environmental issues relevant to the industry.

### What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Observe safe work practices.
- Communicate with others.
- Contribute to a productive working environment.
- Follow good environmental practices.

### Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

### Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
### RTC2005A Fell small trees

#### Unit Descriptor
This competency standard covers the process of small tree felling work where hazards are assessed as low risk. Felling requires assessing conditions and surroundings, and identifying falling requirements, preparing and maintaining felling equipment, bringing the tree down, and completing clean-up operations. Tree felling is usually performed under routine supervision with intermittent checking. Responsibility for some roles and coordination within a team may be required. Competency is demonstrated by the application of knowledge and skills to a range of tree felling tasks and roles usually within established enterprise guidelines.

#### Unit Sector
No Sector Assigned

### ELEMENT PERFORMANCE CRITERIA

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Identify tree felling requirements | 1.1 **Instructions** for tree felling operations are received and clarified with supervisor prior to work being undertaken.  
1.2 Topography and site conditions are assessed and **factors influencing the natural direction of fall** are identified and confirmed with supervisor.  
1.3 Tree is visually assessed and **factors influencing the tree felling operation** are identified and confirmed with supervisor.  
1.4 Natural direction of fall, safe fall zone and exclusion zone are **determined** and confirmed with supervisor.  
1.5 The **environmental implications** of the tree felling operation are identified, and the likely outcomes assessed and reported to the supervisor.  
1.6 **OHS hazards associated with felling operation** are identified, risks assessed and reported to the supervisor. |
| 2. Prepare for tree felling | 2.1 **Felling equipment** and component options that are appropriate to the task being undertaken are selected and prepared.  
2.2 Appropriate **support tools** are prepared, transported and placed to minimise felling delays.  
2.3 Suitable **safety equipment** and **personal protective equipment (PPE)** are selected, checked, used, maintained and stored.  
2.4 Fall zone is cleared of obstacles and articles which may be damaged by felled tree according to enterprise policy.  
2.5 Clear escape route is established appropriate to the site and according to recognised guidelines. |
| 3. Fell tree | 3.1 Location of other personnel is noted and monitored.  
3.2 **Standard tree felling techniques** are determined by ground conditions and state of canopy, and according to enterprise policy.  
3.3 **Corrective action** is taken in response to changing conditions or problems encountered.  
3.4 Planned escape route is used when tree starts to fall.  
3.5 Fall of tree and movement on ground are monitored until tree is stable  
3.6 Safe working practices are employed according to **OHS requirements**. |
4. Complete tree felling operation

4.1 Appropriate method of clearing the site of felled tree is determined.

4.2 Machinery required for removal of felled tree is selected and used according to manufacturers specifications and OHS requirements.

4.3 Fall site is cleared of tree and all tree debris according to enterprise standards.

4.4 Load to be removed is secured according to given instructions, using appropriate equipment.

4.5 Tools and equipment are cleaned, maintained and stored consistent with manufacturers specifications and enterprise guidelines.
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Information about specific tasks associated with the job, such as limitations in conditions and trees and hazards encountered may be communicated to work colleagues and the supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information such as site and tree inspection results, safety issues and work schedules should be discussed with the supervisor and work team members before tree felling commences.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Tree and site assessment, pre-operational checks and organisation of tools, equipment and tasks should be organised before tree felling begins.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Felling small trees may involve working with other members of a team to complete operations in a safe and timely manner.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical techniques may be applied when measuring tree length and distances, the area of exclusion and fall zones, fuel volumes, and capacity of trailers for tree removal.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems relating to processes, unexpected characteristics, movement and condition of the tree, loss of control of tree in falling, faulty equipment, workplace safety, other team members, environmental issues, and interruption of works may require problem solving.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be applied in the preparation, use and maintenance of chainsaws and arboricultural tools and equipment, and communication systems such mobile phones and 2-way radios.</td>
<td>1</td>
</tr>
</tbody>
</table>
**RANGE STATEMENT**

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

<table>
<thead>
<tr>
<th>What type of tree is covered by this standard?</th>
<th>Trees may include small and medium sized (maximum height 6m and maximum diameter at breast height, DBH, 300mm).</th>
</tr>
</thead>
<tbody>
<tr>
<td>What instructions may be relevant when undertaking tree felling operations?</td>
<td>Instructions may include Standard Operating Procedures (SOPs) or verbal directions from manager, supervisor, or senior operator; work notes, routine maintenance schedules, manufacturers service specifications and operators manuals, waste disposal, recycling and re-use guidelines, and OHS procedures.</td>
</tr>
<tr>
<td>What factors may influence the natural direction of fall?</td>
<td>Factors influencing the natural direction of fall may include ground growth, ground slope, ground hazards, wind speed and direction.</td>
</tr>
<tr>
<td>What factors influencing the tree felling operation need to be considered when making an assessment of the tree?</td>
<td>Factors influencing the tree felling operation, which may be determined by assessing the tree, include height of tree, weight bias, canopy distribution, lean of tree, condition of trunk, decay or dead branches, species.</td>
</tr>
<tr>
<td>How is the safe fall zone determined?</td>
<td>The safe fall zone is determined by calculation of height of tree using published mathematical principles. The safety margin for fall zone is determined by identifying wind direction and speed at the time of felling.</td>
</tr>
<tr>
<td>How is the exclusion zone determined?</td>
<td>The exclusion zone may be determined by calculating a minimum of twice the height of the tree, for a full circle around the tree so that no people are put at risk from the tree falling or branches flinging off.</td>
</tr>
<tr>
<td>What environmental implications may impact on tree felling operations?</td>
<td>Environmental implications may include both the positive and negative affects of altering the microenvironment created by trees, levels of noise, dust, and high activity vehicle traffic.</td>
</tr>
<tr>
<td>What hazards associated with felling operation may need to be taken into consideration?</td>
<td>OHS hazards may include working near power lines, tree integrity, manual handling, moving equipment and vehicles, sharp hand tools, falling trees, branches and equipment, uneven surfaces, UV radiation, heat and cold, fatigue, working alone, noise, insects and animals.</td>
</tr>
<tr>
<td>What felling equipment is relevant to this standard?</td>
<td>Felling equipment may include small chainsaw (up to 350mm bar with engine capacity not exceeding 50cc), axes and saws.</td>
</tr>
<tr>
<td>What support tools may be required to undertake tree felling operations?</td>
<td>Support tools may include axe, sledge hammer, alloy and plastic wedges, ropes, hand winches, hand saw, tape measure, height meter, mobile phone.</td>
</tr>
<tr>
<td><strong>What safety equipment may be required?</strong></td>
<td>Safety equipment may include safety signs, barricades, and first aid kit.</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>What PPE may be required to undertake arboriculture support operations?</strong></td>
<td>PPE may include steel cap boots, hard hat, ear protection, protective eyewear, hearing protection, cut resistant trousers or chaps, reflective vest, gloves, helmets with face masks, and sun protection (e.g., sun hat, sunscreen).</td>
</tr>
<tr>
<td><strong>What corrective action may be required during tree felling operations?</strong></td>
<td>Unexpected characteristics of the tree may require modifications to the felling plan, cuts made which lead to potential loss of control of tree in falling may require request for assistance, cutting technique may need adjustment in response to movement and condition of tree.</td>
</tr>
<tr>
<td><strong>What OHS requirements are relevant to this standard?</strong></td>
<td>OHS regulations include Codes of Practice &amp; AS 2727 - 1997, <em>Chainsaws - Guide to safe working practices</em>. Requirements include carrying of correct first aid kit, wearing of required PPE, manual handling, maintenance of safe Amenity Tree Industry practices, recognition of hazards and required actions in tree felling, and use of approved containers for fuel and oil.</td>
</tr>
<tr>
<td><strong>What methods may be utilised to clear the site?</strong></td>
<td>The site may be cleared by logging, chipping or burning the branches that are cut off the trunk, and removed from site in trucks or trailers. Felled trees may be cut into manageable lengths, loaded, secured and removed from the site. The site may then be raked and all rubbish removed. Alternately, it may not be necessary to remove trees from or to clear certain sites (e.g., bushland, natural areas).</td>
</tr>
</tbody>
</table>
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in felling small trees requires evidence that a person assessing felling conditions and surroundings can identify appropriate felling requirements, prepare and maintaining felling equipment, and bring down the tree as required by individual enterprises. The skills and knowledge required to fell small trees must be transferable to a different work environment. For example, different felling techniques will be required for trees exhibiting various characteristics such as softwood, hard wood or diseased specimens. The practical knowledge of techniques used to remove a diseased tree from a median strip during council works may be applied in a different context to removing a rogue tree from a public garden.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Basic operational and maintenance requirements of tree felling equipment.
- Safe working practices for chainsaw operation.
- Safety procedures and potential hazards for working safely in the amenity tree industry.
- Emergency and First Aid procedures.
- The effect of tree removal on the environment.
- Local government regulations that apply to tree removal where appropriate.
- Identification of services and other hazards that affect the performance of the unit.
- Principles and methods of inspecting trees to identify structural defects.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Interpret work procedures including hazard and risk analysis and maintenance schedules.
- Demonstrate safe working practices.
- Communicate orally and using hand signals with other operators to maintain effective and safe felling.
- Participate in teams and contribute to team objectives.
- Calculate or estimate distances such as safe fall zones and exclusion zones.
- Measure distances.
- Monitor and maintain tree felling tools and equipment.
- Recognise structural defects, common diseases, pests, and nutrition deficiencies.
- Operate a chainsaw.
<table>
<thead>
<tr>
<th>Are there other competency standards that could be assessed with this one?</th>
<th>This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential Assessment Information</td>
<td>There is critical information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.</td>
</tr>
</tbody>
</table>
## RTC2012A Plant trees and shrubs

### Unit Descriptor
This competency standard covers the manual planting of trees, shrubs and other containerised and bare-rooted plants, and related tasks such as site preparation and pre-planting treatments. It applies to planting activities in parks and gardens, domestic and commercial landscapes, sporting facilities, planting of windbreaks and shelter belts, programmed environmental maintenance, rehabilitation of natural areas, and the reversal of environmental degradation. Work is usually done under routine supervision and with intermittent checking. Competency is demonstrated by the application of knowledge and skills to a range of planting tasks and roles usually within established enterprise guidelines.

### Unit Sector
Horticulture

## ELEMENT PERFORMANCE CRITERIA

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Prepare for planting operations | 1.1 Planting plan/instructions are obtained and confirmed with supervisor  
1.2 **Occupational Health and Safety hazards** are identified, risks assessed and reported to the supervisor  
1.3 **The environmental implications** associated with the planting program are identified and the likely outcomes assessed and reported to the supervisor  
1.4 **Tools and equipment** are selected that are appropriate to the task being undertaken  
1.5 Suitable **personal protective equipment (PPE)** is selected, used, maintained and stored according to best practice |
| 2. Prepare planting site | 2.1 Tools and equipment for planting are used and maintained according to enterprise work procedures  
2.2 Site is marked out according to planting plan and/or **enterprise work procedures**  
2.3 Competing plants are **controlled** according to supervisor's instructions  
2.4 Soil is **modified** where necessary according to the requirements of the trees to be planted and supervisor's instructions  
2.5 Planting holes are **excavated** according to the needs of the plant and enterprise guidelines |
| 3. Prepare trees and shrubs for planting | 3.1 Trees and shrubs are watered prior to planting to ensure entire root ball is damp  
3.2 Trees and shrubs are removed from containers without damage or dehydration  
3.3 Examine plant and root ball and assess suitability for purpose and reject if unsuitable  
3.4 **Root treatments** are applied according to supervisor's instructions |
| 4. Install trees, shrubs and/or other plants | 4.1 Plants are placed in hole according to enterprise guidelines  
4.2 Planting hole is back-filled and soil consolidated  
4.3 Plants are watered in where required to eliminate air pockets |
5. Complete planting operations

5.1 **Post planting treatment** is applied according to the requirements of the species and supervisor's instructions.

5.2 Tools and equipment are cleaned, maintained and stored according to enterprise and Occupational Health and Safety requirements.

5.3 **Waste** is collected and disposed of or recycled to minimise damage to the external environment.

5.4 **Records** of planting operations are maintained in the appropriate format.

### KEY COMPETENCIES

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information relating to planting activities and problems encountered should be discussed with other members of the work team and the supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Enterprise work procedures and planting plan should be consulted, interpreted and applied to coordinate revegetation activities with further clarification sought from the supervisor where necessary.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Equipment, materials and work procedures for planting activities will need to be arranged before and between work periods, and there will be some responsibility for coordinating work with others.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Planting trees and shrubs may involve working with other members of a team to complete the planting program within given timelines.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Measuring distance, calculating areas, calibrating tools and equipment, estimating quantities of materials, measuring treatment volumes and rates, and the depth and volume of planting holes will require mathematical application.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Relating to planting techniques, processes, the planting area, workplace safety, tools and equipment, environmental issues and other team members may arise when planting trees and shrubs.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>May be applied in the preparation, use and maintenance of horticultural tools and equipment.</td>
<td>1</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

**Occupational Health and Safety hazards** may include

- solar radiation, dust, noise, air and soil-borne micro organisms
- chemicals and hazardous substances
- sharp hand tools and equipment, manual handling
- holes, slippery and uneven surfaces
- spider and insect bites

**Environmental implications** associated with the planting program

- may be beneficial to the external environment (particularly in regard to planting of windbreaks and shelter belts, programmed environmental maintenance, and the reversal of environmental degradation), when the trees and shrubs planted are consistent with the needs of the flora and fauna indigenous to the geographic region
- However, work activities undertaken may have immediate detrimental effects on the surrounding environment, including misuse of chemicals, contamination of ground water or stormwater for excess run-off, levels of noise, dust, and inappropriate waste disposal

**Tools and equipment** may include

- secateurs
- knives
- spades
- forks
- trowels
- rakes
- hoes
- spray equipment
- augers, buckets
- brooms
- wheelbarrows
- hoses and hose fittings
- ancillary equipment such as
  - stabilising materials
  - weed mats
  - stakes
  - tree guards
Personal Protective Equipment may include:

- hat
- boots
- overalls
- gloves
- goggles
- respirator or facemask
- face guard
- hearing protection
- sunscreen lotion

Enterprise work procedures may include:

- supervisors instructions and orders
- planting plans and specifications
- client's instructions
- sketches, work schedules, manufacturers guidelines
- company Standard Operating Procedures (SOP)
- Material Safety Data Sheets (MSDSs)
- waste disposal, recycling and re-use guidelines
- Occupational Health and Safety procedures

Competing plants may be controlled:

- by the application of herbicide to weeds by
  - spray
  - wick
  - cut and paint or injection
  - hand grubbing of seedlings
  - trimming or removal of whole plants or seed heads

Soil modification may include:

- tilling, deep ripping
- addition of nutrition/fertiliser or other organic compounds
- conditioning additives to effect a change in the water holding capacity of the soil
- soil structure, soil texture, and pH, such as
  - gypsum
  - sand
  - lime
  - dolomite
  - chemicals
  - mulches

Specification for planting holes may include:

- dimensions to match plant size and root depth, gouging sides of planting hole to remove glazing of sidewalls
Trees and shrubs may include
- container growth
- tube grown or bare rooted plants across a range of species and growth habits, eg, groundcovers, climbers, bulbs, annuals, grasses, lilies, etc, that do not require mechanised lifting devices

Root treatments may include
- trimming diseased or damaged roots, cutting off lower section of root ball
- separating bound roots, teasing out roots to fit planting hole, removing excess potting media, dips (fungicides, bacterial, hormone)

Post-planting treatments may include
- weed and disease control
- mulching
- fertilising
- watering
- pruning, eg, formative pruning, removal of damaged or dead materials, canopy reduction, thinning, lifting
- securing, eg, tying, staking, bracing, anchoring, guying
- installation of tree guards and protective materials

Waste material may include
- unused work material, plant debris, litter and broken components
- plant-based material may be mulched or composted, plastic, metal, paper-based materials may be recycled, re-used, returned to the manufacturer or disposed of according to enterprise work procedures

Records may include
- number and type of plants and materials used in the planting program, injury and dangerous occurrence reports, treatments and/or amendments applied, chemical use, date, problems encountered
The sport and recreation industry covers

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself

**EVIDENCE GUIDE**

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

**Critical aspects of evidence to be considered**

- Assessment must confirm sufficient knowledge in planting trees and shrubs
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's work environment
- In particular, assessment must confirm the ability to
  - prepare a planting site according to a planting plan
  - excavate a planting hole
  - prepare trees and shrubs for planting
  - install trees and shrubs
  - apply post-planting treatments according to species requirements
  - transfer the skills and knowledge required to plant trees and shrubs to a different work environment, eg. This could include different species for planting, locations, and times of the year

**Interdependent assessment of units**

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Nil
Required knowledge and skills

- Required knowledge
  - Chemical use, toxicity and mode of action of chemicals used
  - Awareness of the impact of planting activities on the surrounding environment
  - Planting techniques relating to specific species
  - Factors affecting the timing and method of tree or shrub planting
  - Initial establishment needs of juvenile plants
  - Soil amelioration techniques
  - Principles relating to the application of mulches and fertilisers
  - Basic plant structure and the physical and nutritional requirements of plants
  - Occupational Health and Safety legislative requirements and Code of Practice
  - Manual handling techniques
  - The effect of adverse outdoor climatic conditions, e.g., rain, hail, or very high ultraviolet radiation, which may prevent or impede planting trees and shrubs

- Required skills
  - Interpret work procedures including planting plans and site map
  - Communicate with team members and supervisor
  - Participate in teams and contribute to team objective
  - Calibrate tools and equipment
  - Measure distance
  - Calculate area, planting and seeding rates, volumes and treatment application rate

Resource implications

- Physical resources - assessment of this competency requires access to
  - appropriate documentation and resources normally used in the workplace
  - tools and equipment
  - personal protective equipment
  - trees and shrubs

- Human resources - assessment of this competency will require human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
  - be competent in this unit
  - be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
  - have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A

Consistency in performance

- Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable to the work environment
Context for assessment

- This unit of competency must be assessed in the context of a sport or recreation activity. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace.
- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes.
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
RTC2016A Recognise plants

Unit Descriptor
This competency standard covers the process of recognising plants that are commonly encountered in horticulture or land management situations. Recognising plants is likely to be under routine supervision with intermittent checking by supervisors, requires acknowledge of plant identification techniques, plant nomenclature, enterprise procedures for obtaining and supplying advice and information about plants, and enterprise expectations about the range and number of plants to be recognised.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare for plant recognition
   1.1 Range of plants requiring recognition is identified according to supervisors/customers needs.
   1.2 Resources and equipment for use in recognition activity are located and identified.
   1.3 Available processes for plant recognition are identified, selected and prepared for use.

2. Recognise specified plants
   2.1 Specified plants are recognised and named according to their identifiable characteristics.
   2.2 Brief descriptions of plant habits, characteristics and significant features are recorded according to enterprise requirements.
   2.3 The advice of supervisors is sought when necessary and where appropriate in the recognition activity.

3. Complete recognition of plants
   3.1 Information about plants is documented according to enterprise requirements and added to the reference collection.
   3.2 Reference collection is updated as new plants are recognised.
   3.3 Any plant debris is disposed of according to enterprise guidelines.
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information relating to plant recognition activities and problems encountered should be discussed with other members of the work team and the supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Enterprise specific plants should be inspected visually research processes undertaken, and the information gained discussed with the work team and supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Equipment, materials and work procedures for recognition activities will need to be arranged before and between work periods.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Plant recognition activities may involve working with other members of a team to complete the program, or work alone with advice and help sought where necessary.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Measuring the length, regularity and period of plant identifying features will require mathematical application.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems relating to the difficulty of recognising certain features of a plant may arise.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be applied in the provision of information about plants to clients and customers.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available.

What range of plants may be relevant to this standard? Plants may be native or introduced species including weeds. Plants will comprise those commonly encountered within the industry workplace.

How will plants be named? Common names will be used in recognition of plants. However, in some situations botanical names may be required. In Indigenous communities, language names can be used in lieu of common names.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What resources may be used to recognise plants?</td>
<td>Resources may include enterprise or public library, business and research organisation websites, suppliers and contractors, enterprise supervisor and team colleague experience, and experts in the local area or industry sector. It may also include personal or enterprise reference collection.</td>
</tr>
<tr>
<td>What equipment may be used to recognise plants?</td>
<td>Equipment may include computer assisted or manual word processors, telecommunication appliances, plant fixing materials, secateurs, folders and exercise books, pens and pencils.</td>
</tr>
<tr>
<td>What processes may be available for aid in the recognition of plants?</td>
<td>Processes may include literature searches, internet browsing, personal consultation with experts, specimen collections, field guides, workplace notes, and use of simple keys.</td>
</tr>
<tr>
<td>What identifiable plant characteristics may be useful when identifying plants?</td>
<td>Plant characteristics may include the shape, size colour, texture, presence of hairs and spikes on leaves, stem, fruit, flower or seed.</td>
</tr>
<tr>
<td>What documentation is involved in identifying plants?</td>
<td>Documentation may include a written description of the plant species including common and botanical names, visible characteristics, details of occurrence or origin, optimum growth requirements and/or a herbarium of plant samples preserved according to the requirements of the enterprise or industry sector. For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.</td>
</tr>
</tbody>
</table>

**EVIDENCE GUIDE**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What evidence is required to demonstrate competence for this standard as a whole?</td>
<td>Competence in recognising plants requires evidence that a person can identify and utilise available resources and equipment to identify plants accurately. The skills and knowledge required to recognise plants must be transferable to a different work environment. For example, this could include different plants, workplace settings and environments.</td>
</tr>
</tbody>
</table>
| What specific knowledge is needed to achieve the performance criteria?   | Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:  
  - Range of plant identification techniques.  
  - Plant nomenclature.  
  - Enterprise procedures for obtaining and supplying advice and information about plants.  
  - Enterprise expectations about the range and number of plants to be recognised. |
What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Recognise the range of plants specific to the enterprise, and describe their attributes, main purpose within the enterprise, specific handling requirements and growth requirements.
- Use simple keys.
- Communicate with customers and clients, interpret questions effectively, and provide limited advice and information about the plants specific to the enterprise.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
## RTC2026A Undertake propagation activities

### Unit Descriptor

This competency standard covers the process of plant propagation undertaken in enterprises involved in plant propagation and production. Competency is demonstrated by the application of knowledge and skills to a range of propagation tasks, such as preparing parent plant stock, collecting propagation materials, pre-planting treatments and basic plant propagation techniques. This unit does not include budding and grafting. The work is carried out within routine methods and procedures under supervision with intermittent checking. Responsibility for some roles and coordination within a team may be required.

### Unit Sector

No Sector Assigned

### PERFORMANCE CRITERIA

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Prepare for plant propagation | 1.1 **Workplace information** is interpreted and clarified according to instructions.  
1.2 **OHS hazards** in the work area are identified, rectified and/or reported.  
1.3 Suitable **personal protective equipment** (PPE) is selected, used, maintained and stored.  
1.4 **Tools and equipment** appropriate to the task being undertaken are selected and prepared according to enterprise guidelines.  
1.5 Propagation material is **collected** using the appropriate method for the species and according to enterprise guidelines.  
1.6 Propagation material is **maintained and stored** to ensure maximum viability. |
| 2. Propagate plants | 2.1 **Pre-treatment** is applied and/or carried out appropriate to the propagation method and species.  
2.2 Propagation techniques are carried out according to the requirements of the species.  
2.3 Propagation material is handled in a way that minimises damage and maximises viability.  
2.4 Water and nutrients are applied to suit the media conditions, plant requirements and **propagation techniques** employed.  
2.5 **Labels** are applied according to enterprise guidelines.  
2.6 Plant health is monitored and **remedial action** is taken according to enterprise guidelines.  
2.7 Propagation activities are carried out according to **OHS requirements**. |
| 3. Complete propagation activities | 3.1 **Records** are completed accurately and at the required time according to enterprise guidelines.  
3.2 Tools and equipment are cleaned and stored according to manufacturer specifications and enterprise guidelines.  
3.3 **Waste** is removed and **hygiene practices** are followed according to enterprise and OHS requirements. |
# KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information relating to work issues, completion and problems encountered, may need to be reported or discussed with the supervisor and others in the work team.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Work instructions, such as the daily planting program, should be located, interpreted and applied, with further clarification sought as necessary. Information relating to propagation activities, such as production statistics, should be noted and recorded at the completion of work tasks.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Undertaking propagation activities involves organising equipment and materials for plant propagation, and planning activities around daily work routines. Discussions with the supervisor and other team members may be required in order to complete tasks efficiently in a logical sequence and in a timely manner.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Propagation activities may involve working with other members of the work team to coordinate operations. For example, the collection and preparation of equipment and planting materials may be organised with another team member who acts in a support capacity.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Skills in counting, tallying and estimation are required to calculate basic production statistics, quantities and personal production rates.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems relating to propagation activities may arise during daily work routines that require corrective action or consultation with supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be applied in the use of heat sterilisation equipment and computer databases and calculators.</td>
<td>1</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

- **What workplace information may be relevant when undertaking propagation activities?**
  - Planting program, Production Statistics, Standard Operating Procedures (SOPs), specifications, work notes, Material Safety Data Sheets (MSDSs), Nursery Industry Accreditation Scheme of Australia (NIASA) Guidelines, manufacturers instructions, product labels, or verbal directions from manager, supervisor, or senior operator.

- **What OHS hazards may be identified in the work area?**
  - Hazards may include manual handling, hazardous substances, moving equipment and vehicles, sharp hand tools, solar radiation, slippery or uneven surfaces, and insect and spider bites.

- **What personal protective equipment (PPE) may be needed to undertake propagation activities?**
  - Personal protective clothing and equipment may include respirators, overalls, boots, gloves, sun hat and sunscreen lotion.

- **What tools and equipment may be required for supporting propagation activities?**
  - Tools and equipment may include secateurs, knives and other cutting instruments, plastic containers and trays, wheelbarrow, trolley, mechanical trolley, shovel, water spray container, dibblers and rubbish bins.

- **How might propagation materials be collected?**
  - Collection procedures for propagation materials may include taking leaf or stem or root cuttings, gathering seeds, lifting bulbs, and dividing clumps.

- **What maintenance and storage procedures may apply to collected propagation materials?**
  - Maintenance and storage procedures may include controlling environmental parameters such as moisture, air, humidity and temperature by methods such as refrigeration, wrapping in wet hessian or plastic, drenching, placing in water and burying in sawdust or other media.

- **What pre-treatments may be relevant to this standard?**
  - Pre-treatments may include hormones, fungicides, cold/moist stratification, rehydration, heat or chemical disinfection, breaking seed coat, cleaning, division and sterilisation.

- **What propagation techniques may be relevant to this standard?**
  - Propagation techniques may include seed - (small seed sown in modules and pricked out or sown in seedbeds by hand), cuttings - (hardwood stem, semi-ripe stem, leaf, root), simple layering, growing on tissue-cultured plants, division or splitting, spores.
**What label information may be required when propagating plants?**

Label information may include date of propagation, species, variety, batch number and cultivar, treatments applied, strike rate.

**What remedial action may be taken to control pests and diseases?**

Remedial action may include applying preventative fungicides, fertilisers, removing and disposing of damaged plant material, irrigation.

**What OHS requirements apply to this standard?**

OHS requirements may include identifying hazards, assessing and reporting risks, cleaning, maintaining and storing tools and equipment, appropriate use of personal protective equipment including sun protection, safe operation of tools and equipment, safe handling, use and storage of chemicals and hazardous substances, correct manual handling; basic first aid, personal hygiene and reporting problems to supervisors.

**What records may need to be maintained in regard to propagation activities?**

Records may include date of propagation, type of propagation carried out, number of plants carried out, source of propagation material, treatments carried out, spray records.

**What waste may be relevant to this standard?**

Waste may include unused propagation material, potting media wastage, damaged plants, and damaged pots.

**What hygiene practices may apply to this standard?**

Hygiene practices may include removing all dirt and organic matter from production surfaces, tools and equipment, disinfecting production surfaces, tools and equipment, disinfestation and removal of plant and media waste, hand washing, footbaths, access restrictions and handling practices which minimise cross contamination.
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in undertaking propagation activities requires evidence that basic propagation activities can be performed in such a manner as to satisfy the workplace or client requirements. Skills involving hygiene practices (disinfestation) and must also be evident. The skills and knowledge required to undertake propagation activities must be transferable to a different work environment. For example, this could include different species, plant types, environments and propagation techniques.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Maintenance requirements of tools and equipment used for propagation.
- OHS requirements of employees.
- Quality specifications/characteristics of a range of parent plants and propagation materials.
- Basic plant nutrition.
- Record keeping relevant to the work function.
- Enterprise requirements for handling and disposal of nursery wastes.
- Enterprise hygiene requirements.
- Common problems that may occur while performing propagation activities in a controlled environment.
- Propagation methods required for a range of plants.
- OHS legislative requirements and Codes of Practice.
- OHS procedures.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Read and interpret instructions.
- Participate in teams and contribute to team objectives.
- Communicate effectively with fellow team members.
- Carry out a variety of propagation techniques.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTC2203A Conduct visual inspection of park facilities

Unit Descriptor
This competency standard covers the process of routine visual inspection of park and recreational facilities to identify visible hazards and existing and/or potential risks. Work is likely to be under routine supervision with intermittent checking. Responsibility for some roles and coordination within a team may be required. Inspection at this level is usually carried out according to establish guidelines.

Unit Sector
No Sector Assigned

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Prepare for visual inspection | 1.1 Site plans and inspection checklists are interpreted and clarified with the supervisor.  
1.2 Specific terminology used in checklists is clarified.  
1.3 **Park site** to be inspected is identified and located on the site plan.  
1.4 **Park facilities, equipment and services** are identified on site from checklist descriptions and site plan. |
| 2. Undertake visual inspection | 2.1 Park facilities, equipment and services are inspected and compared against enterprise presentation standards and OHS requirements.  
2.2 **Health and safety hazards** and **adverse environmental impacts** are identified and recorded on the appropriate form.  
2.3 Situations requiring urgent action are reported immediately to supervisor, in accordance with enterprise working procedures. |
| 3. Submit report | 3.1 Inspection activity, reports and checklists are concise and accurate, and comply with enterprise standards.  
3.2 Checklist and/or report is forwarded to supervisor promptly, according to enterprise working procedures. |
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information relating to the inspection activities and problems encountered should be discussed with other members of the work team and the supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Enterprise work procedures, site plans and presentation standards should be consulted, interpreted and applied to conduct visual inspection activities, with further clarification sought from the supervisor where necessary and in coordination with other work team activities at the site.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Equipment, materials and work procedures for visual inspection of facilities will need to be arranged before and between work periods, and there may be some responsibility for coordinating work with others.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>The visual inspection program may involve working with other members of a team to complete the program.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Numerical comparison of actual facilities with the standards for presentation and safety will require mathematical application.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems relating to inspection techniques, processes, the park area, workplace safety, and other team members may arise during the inspection of park facilities.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be applied in the preparation, use and maintenance of telecommunication and reporting equipment.</td>
<td>1</td>
</tr>
</tbody>
</table>
**RANGE STATEMENT**

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

<table>
<thead>
<tr>
<th>What kinds of park site may require visual inspection?</th>
<th>A range of parks catering to public recreational activities may include municipal playgrounds, picnic grounds and playing fields, and State and Federal conservation, recreational and game reserves, and crown land.</th>
</tr>
</thead>
<tbody>
<tr>
<td>What facilities and equipment may require inspection?</td>
<td>Facilities and equipment may include playgrounds, playground soft fall and pathways, play equipment, parks and street furniture and structures, fences, barbeques, steps and stairs, bollards, tree and grass protection devices, bins, signs, toilets, shelter buildings and structures, and paved, turf and/or grassed recreational areas.</td>
</tr>
<tr>
<td>What services may require inspection?</td>
<td>These may include power, gas, water, and telecommunication lines and outlets.</td>
</tr>
<tr>
<td>What Health and safety hazards may be identified?</td>
<td>Health and safety hazards may include damage to services and outlets, damaged parts, broken glass, syringes, loss of soft surfacing, protruding nails, bolts and splinters, sudden changes in surface levels such as holes and trip points, and worn, rusted and weathered components, overfilled and damaged litter and recycling bins, waterlogged areas, and dysfunctional water bodies and features.</td>
</tr>
<tr>
<td>What adverse environmental impacts may be identified?</td>
<td>These may include environmental nuisance levels of noise associated with the movement of damaged or unserviced parts, smoke emissions from malfunctioning barbecues, odours from malfunctioning water-based amenities and features, waterlogging and run-off associated with leaking water taps, lines and attachments, weed invasion associated with overgrown areas and edges, dumped rubbish, and natural ecosystem depletion associated with the removal of fallen logs and sticks by recreational visitors to fuel wood fires and barbecues when wood is not provided.</td>
</tr>
</tbody>
</table>
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in conducting a visual inspection of park facilities requires evidence that a person working in a public environment can identify malfunctioning components of facilities, equipment and services, and the associated OHS and environmental hazards. The skills and knowledge required for this standard must be transferable to a wide range of work environments, with different facilities and use. For example, the inspection techniques required to identify malfunctioning components of equipment in a playground may also be used to assess and identify malfunctioning components of sports equipment on a playing field, as in preparing a turf surface for play.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Purpose of park facilities inspections, in providing information for effective maintenance and repair work particularly in relation to end use of the facilities and equipment, and the safety of users.
- The practical application of site plans, checklist descriptions and presentation standards to locate and effectively assess facilities and equipment against the required parameters.
- The effect of adverse outdoor climatic conditions (e.g., rain, hail, wind, or very high ultraviolet radiation), on park facilities inspection activities.
- Potential public nature of park inspection activities.
- Hazards investigation and risk assessment.
- Occupational Health and Safety issues, legislative requirements and Codes of Practice.
- Recognition of the range of park facilities, equipment and services relevant to the enterprise (including recommended use, safety parameters, maintenance schedules and manufacturers specifications).
- Terminology used to describe different components of the range of facilities, equipment and services relevant to the enterprise.
- The hazards that are likely to be encountered by visitors using the park facilities and equipment.
- Reporting requirements, procedures and materials for use in park inspection.
- Cleaning, servicing and hygiene requirements of public conveniences.
| What specific skills are needed to achieve the performance criteria? | To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:  
• Participate in teams and contribute to team maintenance and presentation objectives.  
• Interpret instructions, communicate with team members and supervisor, and use the written materials necessary to effectively complete the inspection task.  
• Measure distance and calculate area count multiple facilities of the same type, and compare numerically determined specifications to the enterprise standards.  
• Assess the hazards and associated environmental implications of malfunctioning facilities, equipment and services. |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there other competency standards that could be assessed with this one?</td>
<td>This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.</td>
</tr>
<tr>
<td>Essential Assessment Information</td>
<td>There is critical information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.</td>
</tr>
</tbody>
</table>
RTC2209A Install, maintain and repair fencing

Unit Descriptor

This competency standard covers the functions required to carry out safe and effective conventional fencing work. Conventional fencing refers to post and wire/wire netting under tension, and can be used for animal control or as a deterrent for people and vehicles. It requires a working knowledge of the uses and structure of a range of fences and fencing materials, equipment and tools. It requires an awareness of workplace safety and environmental practices associated with maintenance activities. The work functions in this standard are likely to be carried out under routine supervision within enterprise guidelines.

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare for fencing work

   1.1 **Tools and materials** appropriate to meet job requirements are selected and checked against the **work plan**.
   
   1.2 Faulty or unsafe tools are identified and segregated for repair or replacement according to **enterprise requirements**.
   
   1.3 **Hazards** in the workplace are assessed and minimised according to **OHS** and enterprise requirements.
   
   1.4 Transport of fencing materials and equipment (including safety equipment) is arranged and placed according to work plan.

2. Carry out fence installation, repair and maintenance

   2.1 Suitable **personal protective equipment** is selected, used, maintained and stored according to OHS and workplace procedures.
   
   2.2 Fence is installed, maintained or repaired according to manufacturers guidelines, OHS and enterprise requirements.
   
   2.3 Gates are attached and appropriately positioned for correct operation and function according to work plan.
   
   2.4 Dismantling operations are carried out as required with a focus on minimising unnecessary damage and recovering all **re-useable materials**.
   
   2.5 **Repair** requirements are identified and carried out according to work plan procedures.
   
   2.6 **Replacement posts** are installed to appropriate level and secured through soil replacement and ramming.
   
   2.7 Wire is strung, mounted and fixed according to requirements of work plan or supervisor's instructions.
   
   2.8 All work is carried out safely according to OHS and enterprise requirements.

3. Complete fencing work

   3.1 Post holes are firmly filled to remove potential hazards and minimise environmental impact.
   
   3.2 Work site is **cleared and tidied** and all non-reusable materials are disposed of in an environmentally responsible manner.
   
   3.3 Tools and re-usable materials are transported safely from the work site, cleaned and stored according to enterprise and manufacturers recommendations.
   
   3.4 Further identified work or repair requirements are reported according to enterprise requirements.
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Information with regard to the operation of tools and application methods may be discussed with the supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information with regard to the performance of tools and any identified faults may be reported to the supervisor for repair and organised by records.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Activities involving filling in post holes may be planned and coordinated with repair activities to minimise potential hazards and environmental impact.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>In the application of methods and procedures to complete scheduled fencing tasks within timeframes.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Basic mathematical techniques may be applied in the calculation and measurement of fencing wire and other materials to complete tasks.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Faulty tools or malfunctions may be reported for repair, and arrangements made for replacement in order to minimise disruption to repair and maintenance schedules.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be used to communicate and calculate information with regard to fencing requirements.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables explains the range of contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

What tools and materials might be used?  Tools may include post driver, posthole borer, crowbar, wire strainers and fencing pliers. Materials may include fencing wire which may vary - plain, barbed, ringlock and netting.
| **What information may be included in a work plan?** | This may include designated work tasks, tools and materials for use, procedures for pre-start and safety checks of tools, timeframe for work completion, supervisor's instructions and reporting requirements. |
| **What may be involved in routine pre-operational checks of tools?** | This may include routine safety and pre-start checks, and preparatory procedures including cleaning, lubricating, hand sharpening, tightening, basic repairs and adjustments. |
| **What enterprise requirements may be applicable to this standard?** | Standard Operating Procedures (SOPs), industry standards, production schedules, Material Safety Data Sheets (MSDSs), work notes and plans, product labels, manufacturers specifications, operators' manuals, enterprise policies and procedures (including waste disposal, recycling and re-use guidelines), and supervisors oral or written instructions. |
| **What hazards may be relevant to this standard?** | This may include exposure to hazardous noise, treated timbers, wire breaking, manual handling, trip points, dust solar radiation and adverse weather conditions. It may also include electricity associated with powered tools. |
| **What OHS requirements may be applicable to this standard?** | Safe systems and procedures for:  
  - the use of fencing tools and materials  
  - the operation of vehicles  
  - hazard and risk control  
  - lifting, carrying and handling techniques  
  - manual handling especially when handling posts, coils of wire and using tools  
  - the use, maintenance and storage of personal protective equipment  
  - outdoor work including protection from solar radiation  
  - protection from dusts  
  - administering first aid. |
| **What personal protective equipment may be relevant to this standard?** | This may include boots, overalls, gloves, eye protection, hearing protection and sun protection. |
| **What re-useable materials may be recovered?** | This may include wire, hinges, supports, gates, netting and posts. |
| **What repairs may be carried out?** | This may include replacing posts, rejoining and restraining wires, gate hinges, gate chains and gates, other repairs to gates. |
| **What requirements may be considered when replacing posts?** | Replacements posts need to be consistent with existing fence, height and type. |
What may be involved in clearing and tidying a work site?

This may involve replacing soil, and clearing, removal and safe disposal of non-reusable materials.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in this standard requires evidence of the ability to select the correct tools and equipment and apply appropriate methods to carry out routine maintenance to conventional fences. It also requires the ability to apply task instruction, complete work requirements in an efficient and timely manner, identify re-usable materials, and minimise impacts to the environment. The skills and knowledge required must be transferable to a different work environment. For example, this could include different fencing types, environments and industry settings.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Uses and structures of a range of conventional fence types.
- Uses and types of fencing tools and materials.
- Fencing wire, knots, tensions, capabilities and limitations.
- Strainer assembly, gate types and construction.
- Common fencing hazards and safety precautions.
- OHS legislative requirements and Codes of Practice including hazard and risk assessment relevant to the work function.
- Relevant Codes of Practice with regard to protection of the environment.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Demonstrate safe working practices.
- Minimise environmental impact.
- Interpret and apply task instruction.
- Complete work efficiently within timeframes.
- Maintain physical fitness.
- Read and interpret work plans.
- Communicate with work team and supervisor.
- Calculate and measure fencing wire requirements.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.
There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTC2210A Maintain properties and structures

Unit Descriptor
This competency standard covers the functions required to maintain and repair properties and structures in a situation that does not require the specialist skills of another trade. It involves the application of basic skills and knowledge to match equipment and materials to job requirements, and select the appropriate tools to carry out repairs. The work is likely to be carried out under routine supervision with intermittent checking usually within a team environment.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Identify and confirm maintenance requirements
   1.1 Visual inspections are conducted of **structures and facilities** to locate and evaluate defects, deterioration and impending defects.
   1.2 **Property infrastructure and resources** are checked for correct operation, minor maintenance needs and damage.
   1.3 **Maintenance plan** is confirmed according to supervisor's instructions and **enterprise requirements**.

2. Select and prepare tools, equipment and materials
   2.1 **Tools, equipment and materials** appropriate to the job requirements are selected and checked for serviceability according to manufacturers specifications.
   2.2 Faulty or unsafe tools are identified and segregated for repair or replacement and reported according to enterprise requirements.
   2.3 Existing and potential **hazards** to health and safety are identified, assessed and reported according to **OHS** and enterprise requirements.

3. Carry out routine maintenance
   3.1 Suitable **personal protective equipment** is selected, used, maintained and stored according to OHS requirements.
   3.2 **Routine maintenance** to structures and surroundings is carried out according to the maintenance plan and enterprise requirements.
   3.3 Minor repairs to building cladding, and treatments to structural finishes, are carried out as required to minimise deterioration.

4. Complete maintenance activities
   4.1 Worksite, tools and materials are cleaned, returned to operating order, and stored according to OHS and enterprise requirements.
   4.2 Unwanted materials and waste from maintenance activities is collected, treated and disposed or recycled according to enterprise, OHS and **environmental** requirements.
   4.3 **Relevant information** is documented according to industry, enterprise requirements and OHS requirements.
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
<th>Key Competency</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information with regard to equipment operation, safety procedures and their application may be discussed with work colleagues or the supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information with regard to the performance of equipment and completed repair and maintenance, may be detailed and organised by reports for analysis.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Activities involving the maintenance, cleaning and storing of machinery and equipment may be planned and coordinated around work schedules or sequenced as required.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>In the application of methods and procedures to effectively complete scheduled maintenance projects within timeframes.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Basic mathematical techniques may be applied in the estimation and calculation of materials requirements.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Equipment faults or malfunctions will need to be arranged for repair or replacement to minimise disruption to work schedules.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be used to communicate, measure and record information.</td>
<td>1</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the range of contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

<p>| What structures and facilities might be relevant to this standard? | This may include buildings, greenhouses, igloos, potting houses, shade houses, sheds, cool rooms, glass houses, staff rooms, water tanks, yards, stock handling structures, silage pits, fodder and grain storages, pergolas, poly-tunnels, park furniture, car parks, roads, pathways, work sheds, information boards, benches, landscape features and site furniture. Fences may include weld mesh, picket, post and wire, brick, and hedges. |
| What property infrastructure and resources might be relevant to this standard? | This may include drains and drainage systems, waterways and water supply systems, dams, roads, tracks, soil conservation works, car parks, vegetation, windbreaks, paths, silage pits and loading bays. Drains may include agricultural drains, spoon or swale drains and culverts. Water supply may include irrigation systems, dams and troughs. |
| What information may be included in a maintenance plan? | This may include specific intervals and procedures for maintenance procedures, designated work tasks, routine servicing procedures, instructions for pre-start and safety checks, repair requirements, current operational details, tools, parts and supplies allocated for use, instructions for cleaning and disposal of waste and contaminants, supervisors instructions, timeframe for work completion, and reporting requirements. |
| What enterprise requirements may apply to this standard? | This may include local building codes, Australian Quality Standards, Standard Operating Procedures (SOPs), industry standards, work notes, product labels, manufacturers specifications, Material Safety Data Sheets (MSDSs), operator and emergency procedures manuals, technical information, enterprise policies and procedures (waste disposal, recycling and re-use guidelines), supervisors oral or written instructions and reporting requirements. |
| What tools, equipment and materials may be used? | This may include hand or small power tools, cutting tools, and measuring equipment. Structural finishes may require paint or stains. Cladding maintenance may require corrugated iron, weatherboards, glass, shade cloth, plastic or cement sheeting. Concrete tools and equipment may also be required. |
| What hazards may be associated with maintenance activities? | Workplace hazards may include exposure to loud noise and fumes, solar radiation, dust and hazardous substances. It may also include oil and grease spills and electricity while using powered tools. |</p>
<table>
<thead>
<tr>
<th><strong>What OHS requirements may be relevant to this standard?</strong></th>
<th>Systems and procedures for:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• the safe operation of tools and equipment</td>
</tr>
<tr>
<td></td>
<td>• maintenance and repair methods</td>
</tr>
<tr>
<td></td>
<td>• identifying and reporting hazards</td>
</tr>
<tr>
<td></td>
<td>• safe lifting, carrying and manual handling</td>
</tr>
<tr>
<td></td>
<td>• the safe handling and storage of hazardous substances</td>
</tr>
<tr>
<td></td>
<td>• the appropriate use of personal protective equipment</td>
</tr>
<tr>
<td></td>
<td>• outdoor work including protection from solar radiation</td>
</tr>
<tr>
<td></td>
<td>• working at heights, e.g., from a ladder</td>
</tr>
<tr>
<td></td>
<td>• working in confined spaces</td>
</tr>
<tr>
<td></td>
<td>• protection from hazardous noise, organic and other dusts.</td>
</tr>
</tbody>
</table>

| **What personal protective equipment may be relevant to this standard?** | This may include boots, hat/hard hat, overalls, gloves, protective eyewear, safety harness, hearing protection, respirator or facemask, and sun protection. |

| **What may be involved in carrying out routine maintenance?** | Routine maintenance may include assisting in the erection of simple property structures, identifying and repairing damage or applying treatments to building cladding and structural finishes, checking fences and repairing holes or other damage, checking paths, tracks and roadways for potholes, weeding and undertaking effective drainage and minor repairs. It may also include checking water supplies for correct operation and pollution, and carrying out repairs and maintenance as required. |

| **What positive environmental procedures may be applied?** | The safe and environmentally responsible disposal of maintenance debris and waste. |

| **What relevant information may be documented?** | This may include the use and performance of tools and equipment, operational faults or malfunctions, completed maintenance, repair tasks and outcomes, and hazard and incident reports. |
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in maintaining properties and structures requires evidence of the ability to conduct simple repairs, erect structures, apply task instruction, and maintain a clean and safe worksite. It also requires an awareness of daily work routines including the need to keenly observe and report the need for maintenance and repair. Evidence must be demonstrated in the employment of safe workplace and environmentally responsible practices. The skills and knowledge required to maintain properties and structures must be transferable to a different work environment. For example, this could include different properties and structures, maintenance activities and industry settings.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Characteristics, capabilities and limitations of materials, equipment and tools.
- Operation of water taps and reticulation systems.
- Types of building cladding and finishes, purpose and use.
- Identification of defects and appropriate repair methods.
- Appropriate selection of repair materials.
- OHS legislative requirements and Codes of Practice.
- Relevant Codes of Practice with regard to protection of the environment.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Interpret and apply task instructions.
- Operate a broad range of tools and equipment.
- Ability to work in team environment.
- Observe and report on the condition of structures and equipment.
- Demonstrate safe working practices.
- Communicate with work team and supervisor.
- Estimate and calculate volumes and usage.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTC2301A Undertake operational maintenance of machinery

Unit Descriptor
This competency standard covers basic maintenance procedures required to support machinery operations. It involves non-specialist skills to perform basic servicing and repairs on a range of machinery according to scheduled maintenance programs. Competency requires an awareness of workplace safety, and positive environmental practices associated with maintenance activities. The work is likely to be carried out under limited supervision with checking only related to overall progress within established enterprise routines and procedures.

Unit Sector
Horticulture

ELEMENT PERFORMANCE CRITERIA

1. Prepare for maintenance
   1.1 Maintenance plans are accessed and understood prior to undertaking maintenance work
   1.2 Tools and supplies are selected appropriate to job requirements and confirmed against maintenance plan
   1.3 Tools are inspected for serviceability and prepared for use according to manufacturers specifications and enterprise requirements
   1.4 Occupational Health and Safety hazards in the workplace are identified, risk assessed and reported according to enterprise requirements

2. Perform scheduled maintenance
   2.1 Suitable personal protective equipment is selected, used, maintained and stored according to Occupational Health and Safety requirements
   2.2 Greasing, lubrication and other basic servicing of machinery is carried out according to manufacturers specifications and enterprise requirements
   2.3 Equipment is adjusted according to manufacturers specifications and enterprise requirements
   2.4 Basic diagnostic techniques are applied and mechanical faults are identified and rectified according to manufacturers specifications
   2.5 More serious or complex faults are reported for referral according to enterprise requirements

3. Complete maintenance activities
   3.1 Tools are cleaned and stored according to Occupational Health and Safety and enterprise requirements
   3.2 Waste from maintenance activities is collected, treated and disposed or recycled according to enterprise environmental requirements
   3.3 Work areas are cleaned, returned to operating condition and maintained according to Occupational Health and Safety and enterprise requirements
   3.4 Relevant information is documented according to industry and enterprise requirements
### KEY COMPETENCIES

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>With regard to complex mechanical faults may be reported and referred for repair or replacement</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>With regard to machinery servicing, identified faults and repairs undertaken may be documented for reference and analysis, and organised by reports</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>For machinery maintenance through maintenance schedules and work schedules, or sequenced as required</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>In the application of communication, methods and procedures to complete individual tasks to achieve scheduled maintenance requirements</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>May be applied in the calculation and measurement of volumes, weights and consumption, particularly in relation to lubrication and fuel requirements</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Tool faults or malfunctions will need to be repaired or replaced to complete and minimise disruption to scheduled maintenance work</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>To communicate, measure and record information with regard to machinery maintenance, usage and performance</td>
<td>1</td>
</tr>
</tbody>
</table>

### RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

**Maintenance plan** may include

- details of scheduled maintenance and servicing requirements and procedures
- tools and supplies required to undertake maintenance tasks
- pre-start and safety checks for tools and machinery
- mechanical diagnostic procedures
- common mechanical faults and adjustment or repair procedures
- current operational details
- supervisors instructions and reporting requirements
Tools and supplies may include

- hand tools
- hand held power tools
- grease guns
- safety equipment
- cleaning and maintenance supplies including
  - grease
  - fuel
  - oil
  - chemicals
  - water steam
  - power
  - air

Preparations may include

- routine safety and pre-start checks, and procedures involving
  - cleaning
  - lubricating
  - hand sharpening
  - priming pumps
  - clearing filters
  - basic repairs
  - tightening and adjustments

Standard Operating Procedures (SOPs) may include

- industry standards
- production schedules
- Material Safety Data Sheets (MSDS)
- work notes and plans
- products labels
- manufacturers specifications
- operator's manuals
- enterprise policies and procedures including
  - waste disposal
  - recycling
  - re-use guidelines
- supervisors oral or written instructions
Occupational Health and Safety may include safe systems and procedures for
- operating and maintaining machinery including hydraulics and guarding of exposed moving parts
- hazard and risk control
- manual handling including lifting and carrying
- the provision of safety decals and signage
- handling, application and storage of hazardous substances
- outdoor work including protection from solar radiation, dust and noise
- lock out or danger tag procedures
- protection of people in the workplace
- the appropriate use maintenance and storage of personal protective clothing and equipment

Workplace hazards may include
- exposure to loud noise and fumes, solar radiation, dust, and hazardous substances
- it may also include
  - oil and grease spills
  - electricity
  - mechanical malfunctions and entanglement with machinery from exposed moving parts including hydraulics

Personal protective equipment may include
- boots
- hat/hard hat
- overalls
- gloves protective eyewear
- safety harness
- hearing protection
- respirator or facemask
- sun protection, eg, sun hut, sunscreen
Basic servicing procedures may include

- greasing and lubricating
- carrying out checks of the cooling system
- fuel
- grease and oil
- battery levels
- inspections of tyre pressures
- fan belts
- leads
- lines
- connections
- air filters
- electrical
- hydraulics
- steering
- lighting
- transmission
- confirmation of safety guards
- Power Take Off (PTO) stubs and shafts

Enterprise requirements applicable to this standard may include

- industry standards
- production schedules
- Material Safety Data Sheets (MSDS)
- work notes and plans
- product labels
- manufacturers specifications
- operator's manuals
- enterprise policies and procedures including
  - waste disposal
  - recycling
  - re-use guide
  - supervisors oral or written instructions

Machinery covered may include

- motorised equipment and implements
- motorised machinery may include
  - sprayers
  - tractors
  - mechanical pruners
  - harvesters, turf mowers
  - rotary hoes, chainsaws
  - hedge trimmers
  - winches
  - vehicles
  - motorcycles

Mechanical faults can be defined as basic faults that are reasonably within the scope of non-mechanical faults and may include

- damage, wear, malfunction or unsoundness
Positive environmental practices relevant to maintenance activities may include

- the reduction of excessive noise and exhaust emissions, the safe use and disposal of maintenance debris including oil containers, fuel and chemical residues
- it may also include preventative measures with regard to soil disturbance, dust and increased run-off flows caused by servicing, maintenance and cleaning activities

Relevant information may include

- tool usage and operational faults or malfunctions, machinery servicing and repair procedures and outcomes, machinery performance and operational faults or malfunctions, damage details, and hazard and incident reports

The sport and recreation industry covers

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself
EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered

- Assessment must confirm sufficient knowledge in performing operational maintenance of machinery
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's environment
- In particular, assessment must confirm the ability to
  - to select and match the correct tools and supplies to carry out scheduled servicing and minor repairs to a range of plant and equipment
  - apply operational safety procedures
  - access and interpret maintenance plans
  - apply basic diagnostic techniques
  - recognise and rectify minor mechanical faults
  - maintain maintenance records
  - transfer the skills and knowledge to undertake operational maintenance of machinery to a different work environment, eg, this could include different machinery and equipment, and workplace

Interdependent assessment of units

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Nil
Required knowledge and skills

- Required knowledge
  - Types and uses of lubricants and other commonly used servicing materials
  - Operational principles of machinery including mechanical and auto-electrical systems
  - Servicing characteristics of plant and equipment
  - Types, characteristics, uses and limitations of hand power tools
  - Functions of components of common mechanical and hydraulic systems
  - Working principles of 2-stroke, 4-stroke, petrol and diesel engines
  - Set-up requirements of plant and equipment, and principles of calibration
  - Basic diagnostic processes and techniques
  - Environmental Codes of Practice with regard to maintenance activities
  - Occupational Health and Safety legislative requirements and Codes of Practice
  - Hazard identification and assessment
  - Occupational Health and Safety procedures

- Required skills
  - Nil

Resource implications

- Physical resources - assessment of this competency requires access to
  - personal protective equipment
  - tools and supplies
  - appropriate documentation and resources normally used in the workplace

- Human resources - assessment of this competency will require human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
  - be competent in this unit
  - be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
  - have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A

Consistency in performance

- Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable to the work environment
Context for assessment

- This unit of competency must be assessed in the context of a sport or recreation activity. For valid and reliable assessment, the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances, and equipment likely to be encountered in a real workplace.
- Assessment of this unit of competence will usually include questioning of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes.
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
RTC2304A Operate and maintain chainsaws

Unit Descriptor
This competency standard covers the maintenance, preparation and operation of hand-held chainsaws in a work environment. It requires the application of skills and knowledge to cross-cut fallen timber using appropriate cutting techniques to maximise volume and quality recovery. It also requires knowledge of licensing and OHS legislative requirements associated with chainsaw operation along with duty of care to self, others and the environment. The work in this standard is likely to be carried out under routine supervision with intermittent checking within enterprise guidelines.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Recognise and apply workplace safety procedures
   1.1 OHS procedures relevant to the maintenance and operation of chainsaws are recognised and applied according to enterprise requirements.
   1.2 Hazards in the work area are identified and controlled according to OHS and enterprise requirements.
   1.3 Suitable personal protective equipment is selected, used, maintained and stored according to OHS and enterprise requirements.
   1.4 Relevant licensing and legislative requirements with regard to the operation of chainsaws are recognised and accessed.

2. Check and maintain chainsaw
   2.1 Tools and materials required for maintenance procedures are selected, checked and confirmed against maintenance plan.
   2.2 Routine checks and maintenance procedures are conducted prior to operation and according to manufacturers specifications and maintenance plan.
   2.3 Chainsaw faults or malfunctions are identified, tagged and reported for repair according to OHS and enterprise requirements.
   2.4 Completed chainsaw maintenance procedures are detailed and recorded according to enterprise requirements.

3. Operate chainsaw
   3.1 A safe working site is maintained and sawing materials identified and positioned for operation according to OHS and enterprise guidelines.
   3.2 Risks to self, others and the environment are recognised and controlled according to OHS and enterprise requirements.
   3.3 Cutting methods are determined appropriate to species of material, and chainsaw is operated according to manufacturers specifications and enterprise requirements.
   3.4 Effective worksite communication is maintained to ensure efficient workflow and address immediate problems.
   3.5 Environmental implications associated with chainsaw operation are identified, assessed and controlled according to enterprise requirements.
4. Complete and check chainsaw operation

4.1 Chainsaw damage, malfunctions or irregular performance are recorded and reported according to enterprise requirements.

4.2 Chainsaw is cleaned, maintained and stored according to manufacturers specifications and enterprise requirements.

4.3 Relevant reports are maintained to industry standards according to enterprise requirements.

4.4 Personal protective equipment is cleaned, maintained and stored.

KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Information with regard to chainsaws, their application and cutting methods may be discussed with the supervisor and others in the work group.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information with regard to chainsaw performance, faults and maintenance requirements may be detailed and monitored for analysis, and organised by records and reports.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Checks and maintenance activities may be planned and coordinated around work schedules or sequenced as required.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Team work may be applied in the communication and coordination of tasks to achieve specified work requirements.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematics may be applied in the calculation and measurement of fuel consumption and volume dimensions.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Chainsaw malfunctions or breakdown will require arrangements for repair or replacement to meet work requirements.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>To communicate, record operational records, and troubleshoot chainsaw performance problems.</td>
<td>1</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the range of contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

What OHS requirements may be relevant to this standard?
Safe systems and procedures for:
- operating and maintaining chainsaws
- hazard and risk control
- manual handling including lifting and carrying
- handling, application and storage of hazardous substances
- outdoor work including protection from solar radiation, dust and noise
- the appropriate use, maintenance and storage of personal protective equipment.

It may also include systems to ensure the assessment of workers safety skills, compliance with enterprise OHS induction, and the provision of appropriate training programs.

What types of chainsaws may be applicable to this standard?
Types may include engine or electrically operated hand-held chainsaws including top handle chainsaws and pole saws.

What enterprise requirements may be applicable to this standard?
Standard Operating Procedures (SOPs), industry standards, production schedules, Material Safety Data Sheets (MSDSs), work notes and plans, product labels, manufacturers specifications, operators' manuals, enterprise policies and procedures (including waste disposal, recycling and re-use guidelines), and supervisors oral or written instructions.

What hazards may be associated with chainsaw operation?
Hazards may include exposure to loud noise and exhaust fumes, cutting of treated timbers, solar radiation, dust, mechanical vibration, vibration injury, struck by tree or tree limbs, kick back from saw, presence of dangerous insects and spiders, hazardous substances (fuel), the presence of bystanders, livestock and wildlife, adverse weather conditions and confined spaces.

What personal protective equipment may be relevant to this standard?
PPE may include steel cap boots, hard hat, ear protection, protective eyewear, hearing protection, cut resistant trousers or chaps, reflective vest, gloves, helmets with face masks, and sun protection (e.g., sun hat, sunscreen).

What information might be included in a maintenance plan?
This may include details of scheduled pre-operational checks and maintenance procedures, designated job tasks, selection of equipment, resources and materials to be used, supervisors instructions, timeframe for work completion, and reporting requirements.
What might be involved in routine checks and maintenance procedures?
This may include pre-start checks, inspections of chainsaw body, chain guards and chain sprockets, checks of air filters and spark plugs, checks and adjustments of chain tension, oil and fuel, and the replacement of worn or faulty parts. It may also include an assessment of saw sharpness.

What are the requirements for a safe working site?
A level and clear surface on which to cut the material, and the regular removal of off-cuts and other debris during sawing operations to maintain surfaces and worksite.

What sawing materials may be identified and positioned?
Sawing materials may include logs and packs of timber (hardwood or softwood), and may range in size and weight. Preparation involves the safe lifting of the material to be sawed onto a clear and level surface and securing into position with chains or wedges.

What risks may be associated with the operation of chainsaws?
This may include 'kickback' which is a sudden upward and backward movement of the saw which occurs when the tip of the bar nose makes contact with the sawing material. To prevent kickback, ensure chainsaw is fitted with an inertia-activated chain break, ensure the break mechanism is clean and operates effectively, use low-kickback chain types and avoid lowering the depth gauges too much when sharpening. Risks may also include being stuck by tree or limb, vibration injury from poorly maintained chainsaw, permanent hearing loss, cutting above shoulder height, handling the chainsaw with one hand, and fire risk as a result of fuel spillage or sparks.

What cutting methods and procedures may be considered?
Types of cutting techniques may include bridging, swinging, boring, limbing and horizontal cuts. Procedures may involve a visual assessment of the sawing material for defects, the selection of cutting positions and patterns to minimise capping and splitting, and maximise volume and quality of recovery.

Who might be involved in the facilitation of worksite communication?
This may include the supervisor and other workers.

What environmental implications may be associated with the operation of chainsaws?
Negative environmental impacts may result from excessive noise and exhaust emissions, the incorrect use and disposal of maintenance debris (oils and oil containers), and hazardous substances (fuel).

What reports may be recorded and maintained?
This may include production and tally sheets, quality forms, production sheets, mandatory or statutory inspections, maintenance outcomes, faults, malfunctions and damage details, and hazard and incident reports.
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in this standard requires evidence of the ability to demonstrate safe workplace practices in the preparation of a suitable worksite, perform cross-cutting operations, and conduct routine pre-operational checks and maintenance of a range of hand-held chainsaws. It also requires the ability to communicate effectively, recognise and control hazards, implement risk control measures, apply basic mathematical procedures such as estimation and measurement, and monitor and maintain relevant enterprise records. The skills and knowledge required to operate and maintain chainsaws must be transferable to a different work environment. For example, this could include different types of timber, environments and chainsaws.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Relevant State/Territory legislation and regulations with regard to the operation of chainsaws.
- OHS legislative requirements and Codes of Practice.
- Hazards and risks when using chainsaws.
- Operating principles and operating methods.
- Various types of chainsaws and respective functions.

- Effects of timber defects on recovery.
- Environment Codes of Practice with regard to chainsaw operation.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Safely cross-cut fallen timber using compression and tension cuts with a hand held chainsaw.
- Maximise volume and quality of recovery.
- Demonstrate safe and environmentally responsible workplace practices.
- Obtain relevant licences and permits.
- Read and interpret manufacturers specifications, work and maintenance plans, and MSDSs.
- Effectively communicate information, interpret and apply task instructions, and maintain records and reports.
- Estimate and measure dimensions, and calculate volumes.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.
There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTC2306A Operate vehicles

Unit Descriptor

This competency standard covers the process of maintaining and operating vehicles in rural, horticultural or land management setting. Competency requires the application of basic driving skills to safely utilise various controls and features of a range of vehicles, and demonstrate safe driving techniques. Competency requires knowledge of legislative requirements with regard to licensing, and an awareness of duty of care to self, others and the environment. The work is likely to be carried out under minimal supervision within enterprise guidelines.

Unit Sector Horticulture

ELEMENT PERFORMANCE CRITERIA

1. Prepare vehicle for use
   1.1 Occupational Health and Safety hazards in the work area are identified and reported to the supervisor
   1.2 Routine checks and maintenance of vehicle are conducted prior to use according to manufacturers specifications and enterprise requirements
   1.3 Faults or malfunctions are identified and reported for repair according to enterprise requirements
   1.4 Loads are secured according to safe operational specifications, Occupational Health and Safety, legislative and enterprise requirements

2. Drive vehicle
   2.1 Suitable personal protective equipment is selected, used, maintained and stored according to Occupational Health and Safety and enterprise requirements
   2.2 Vehicle is driven in a safe and controlled manner and monitored for performance and efficiency
   2.3 Driving hazards are identified, anticipated and controlled through the application of safe and defensive driving techniques
   2.4 Environmental implications associated with vehicle operation are recognised and positive enterprise environmental procedures applied where relevant

3. Complete and record vehicle performance
   3.1 Shut-down procedures are conducted according to manufacturers specifications and enterprise requirements
   3.2 Malfunctions, faults, irregular performance or damage to vehicle is detailed and reported according to enterprise requirements
   3.3 Vehicle is cleaned and decontaminated (where necessary), secured and stored according to enterprise and Occupational Health and Safety requirements
   3.4 Vehicle operational reports are maintained to industry standards according to enterprise requirements
KEY COMPETENCIES

<table>
<thead>
<tr>
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<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>With regard to hazards and unsafe work practices associated with vehicle operation may be reported to the supervisor and work team</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>With regard to vehicle performance, faults and maintenance carried out may be detailed and recorded for reference and organised by reports</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Maintenance and repairs may be planned and coordinated around work schedules or sequenced as required</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>May be applied in the application of methods and procedures to complete maintenance procedures and complete records</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>May be applied in the calculation and measurement of load and weight, servicing requirements, and distance and fuel consumption</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Breakdown, faults or malfunctions will require arrangements for repair or replacement to achieve work schedules</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>To communicate, measure and record information with regard to maintenance, usage and performance of vehicle</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

**Occupational Health and Safety Requirements** may include
- the safe operation and maintenance of vehicles
- checks to ensure loads are secure and within working specifications
- hazard and risk control
- manual handling including lifting and carrying
- the application of emergency/defensive driving techniques
- handling, application and storage of hazardous substances
- outdoor work including protection from solar radiation, dust and noise
- the appropriate use, maintenance and storage of personal protective equipment
- passengers only carried when there is a seat approved by the manufacturer
Hazards may include

- exposure to loud noise and fumes, hazardous substances (fuels, oils), solar radiation and organic and other dusts
- it may also include ergonomic hazards associated with posture and mechanical vibration
- other hazards may include
  - bystanders
  - livestock and wildlife
  - difficult terrain and varying gradients
  - broken ground
  - potholes
  - ditches
  - gullies
  - embankments
  - obstacles
  - adverse weather conditions
  - electricity
  - overhead hazards including
    - powerlines
    - loose clothing
    - speed and fatigue
    - load shifts
    - mechanical malfunctions
  - exposed moving parts including hydraulics, run over by vehicle, crushed by roll over, loads being carried, and other machinery
Routine checks and maintenance prior to operation may include

- cabin drills, pre-start and safety checks including
  - an assessment of tyres
  - wheels
  - controls and cables
  - lights
  - safety mirrors
  - electrics
  - safety restraints
  - chain/driveshaft
  - chassis and suspension
- service and maintenance of
  - cooling system
  - fuel
  - oils and lubricants
  - battery levels
  - tyre pressure
  - fan belts
  - leads
  - lines
  - connections
  - air filters
  - air conditioning
  - brakes
  - clutch
  - gearbox
  - steering
  - lighting
  - transmission

Vehicles may include

- utilities, four wheel drive vehicles, motorcycles (2 and 4 wheel), and light trucks

Enterprise requirements may include

- Standard Operating Procedures (SOPs)
- industry standards
- production schedules
- Material Safety Data Sheets (MSDSs)
- work notes and plans
- product labels
- manufacturers specifications
- operators manuals
- enterprise policies and procedures including
  - waste disposal
  - recycling
  - re-use guidelines
- supervisors oral or written instructions
Personal Protective Equipment may include
- boots
- overalls
- gloves
- protective eyewear
- hearing protection
- respirator or facemask
- sun protection, eg, sun hat, sunscreen

Safe and controlled vehicle operation can be achieved through
- appropriate selection and use of controls, features, settings and operational techniques for the terrain and weather conditions without causing damage to
  - machinery
  - equipment
  - person
  - property or environment

Environmental implications for vehicles may result in negative environmental impacts, and may result from
- excessive noise and exhaust emissions
- the unsafe use and disposal of maintenance debris
  - oil containers
  - chemical residues
- hazardous substances (fuel, oils)
- high traffic activity, particularly the repeated use of tracks, may negatively impact in soil disturbance, dust problems and increased run-off flows from unsafe cleaning and servicing activities

Shut down procedures for vehicles may include
- turning the engine off, safe dismounting and securing the vehicle
- it may also include parking away from hazards, maintaining a clear thoroughfare, refuelling and cleaning the vehicle of soil, plant and animal material

Vehicle reports may include
- routine checks and maintenance
- scheduled maintenance activities
- mandatory or statutory inspections
- faults
- malfunctions
- damage details
- hazard and incident reports
The sport and recreation industry covers

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered

- Assessment must confirm sufficient knowledge in the operation of vehicles
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's work environment
- In particular, assessment must confirm the ability to
  - use basic driving skills to drive effectively, with or without loads, in different terrain, weather conditions and emergency situations
  - carry out routine checks and maintenance
  - record performance details
  - demonstrate safe workplace and positive environmental practices associated with vehicle operation
  - transfer the skills and knowledge required to operate vehicles to a different work environment, eg, this could include different vehicles, conditions and workplace situations
Interdependent assessment of units

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Nil

Required knowledge and skills

- Required knowledge
  - Components, controls and features of vehicles and their functions
  - Operating principles and operating methods
  - Load limits and the principles of weight distribution with regard to load shifting and vehicle movement
  - Effects of adverse weather and terrain conditions on the operation of vehicles
  - Occupational Health and Safety legislative requirements and Codes of Practice
  - Environmental Codes of Practice with regard to the operation of vehicles
  - Relevant State/Territory legislation and regulations with regard to licensing, road and traffic requirements

- Required skills
  - Steer, manoeuvre and position vehicles in a smooth and controlled manner in on and off-road conditions
  - Demonstrate safe and environmentally responsible workplace practices
  - Obtain relevant licenses and permits
  - Demonstrate emergency procedures and safe driving techniques
  - Read and comprehend operator manuals
  - Effectively communicate faults, malfunctions and workplace hazards
  - Interpret and apply task instructions, report and maintain operational records
Resource implications

- Physical resources - assessment of this competency requires access to
  - personal protective equipment
  - vehicles
  - appropriate documentation and resources normally used in the workplace
- Human resources - assessment of this competency will require human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
  - be competent in this unit
  - be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
  - have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A

Consistency in performance

- Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable to the work environment

Context for assessment

- This unit of competency must be assessed in the context of a sport or recreation activity. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards and circumstances and equipment likely to be encountered in a real workplace
- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes
- Where performance is not directly observed and/or required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
RTC2307A Operate machinery and equipment

Unit Descriptor

This competency standard covers the maintenance and operation of machinery and equipment. A practical application of skills and knowledge is required to carry out pre-operational checks, calibrate equipment, report faults and maintain operational records. In addition, an awareness of workplace safety and positive environmental practices associated with machinery and equipment operation is essential. This work is likely to be carried out under routine supervision within enterprise guidelines.

Unit Sector Horticulture

ELEMENT PERFORMANCE CRITERIA

1. Prepare machinery and equipment for use
   1.1 Machine and equipment is selected appropriate to job requirements and confirmed against a work plan
   1.2 Routine pre-operational checks of machinery and equipment are carried out to manufacturers specifications and enterprise requirements
   1.3 Equipment is securely attached and calibrated for operation to manufacturers specifications
   1.4 Faulty machinery and equipment is identified, safety tagged, and reported to supervisor according to enterprise requirements
   1.5 Occupational Health and Safety hazards in workplace are identified, risk assessed and reported according to enterprise requirements

2. Operate machinery and equipment
   2.1 Machinery and equipment is operated in a safe and controlled manner, and monitored for performance and efficiency
   2.2 Risk to self, others and the environment are recognised and minimised according to enterprise and Occupational Health and Safety requirements
   2.3 Suitable personal protective clothing and equipment is selected, used, maintained and stored according to Occupational Health and safety requirements
   2.4 Environmental implications associated with machinery operation are identified, assessed and reported to the supervisor

3. Check and complete machinery and equipment operation
   3.1 Machinery and equipment shut-down procedures are carried out to manufacturers specifications and enterprise requirements
   3.2 Machinery and equipment operational records are maintained according to enterprise requirements
   3.3 Machinery and equipment damage, malfunctions or irregular performance are recorded and/or reported according to enterprise requirements
   3.4 Machinery and equipment is cleaned, secured and stored according to manufacturers specifications and enterprise requirements
### KEY COMPETENCIES

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>With regard to the performance and efficiency of machinery and equipment may be observed and recorded for analysis and organised by reports</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information and ideas with regard to machinery and equipment, safety procedures and their application may be discussed with colleagues and the supervisor</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Involving maintenance and repairs to machinery and equipment may be planned and coordinated around work schedules or sequenced as required</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>May be applied in methods and procedures to complete maintenance and job functions to achieve work plan requirements</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>May be applied in the calculation and measurement of load weights, distance, consumption and oil and fuel requirements</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Machinery and equipment breakdown, faults or malfunctions will need to be arranged for repair or replacement to achieve work plan requirements</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>To communicate, measure and record information with regard to maintenance, usage and performance of machinery and equipment</td>
<td>1</td>
</tr>
</tbody>
</table>

### RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

**Machinery and equipment** may include

- hydraulic equipment
- stationary engines
- spraying equipment
- stump grinders
- mulches and chippers equipment
- powered trailers and three point linkage equipment
- excludes
  - chainsaws
  - tractors
  - vehicles and earth moving equipment
Work plans may include

- pre-operational and safety checks
- routine maintenance procedures
- designated job tasks
- equipment
- resources and materials for use
- supervisors instructions
- timeframe for work completion and reporting requirements

Pre-operational checks may include

- pre-start and safety checks including
  - the service and maintenance of cooling system
  - checking fuel
  - oils and lubricants
  - electrolyte levels
  - wheels
  - tyre pressure
  - fan belts
  - leads
  - lines
  - connections
  - air filters
  - brakes
  - clutch
  - gearbox
  - steering
  - lighting and transmission
- inspection of safety guards, Power Take Off (PTO) stubs and shafts, and hitch and towing points
- checking and confirming equipment calibration settings and operating methods for turbo-charged engines
- observing and monitoring noise levels for correct operation
- preparation of independently powered tools may include
  - cleaning
  - priming
  - tightening
  - basic repairs and adjustments
- identify and segregate unsafe or faulty equipment for repair or replacement
Enterprise requirements may include

- standard operating procedures (SOPs)
- industry standards
- production schedules
- Material Safety Data Sheets (MSDS)
- work notes
- product labels
- manufacturers specifications
- operators manuals
- enterprise policies and procedures
  - including waste disposal
  - recycling
  - re-use guidelines
- Occupational Health and Safety procedures
- supervisors oral or written instructions
- work and routine maintenance plans

Occupational Health and Safety requirements may include systems and procedures for

- the safe operation and maintenance of machinery and equipment, including hydraulics, and guarding of exposed moving parts
- hazard identification, assessment and reporting
- emergency operating and defensive driving procedures
- ensuring working loads are secure and within working specifications
- safe lifting, carrying and handling
- appropriate use, maintenance and storage of personal protective equipment
- outdoor work including protection from solar radiation
- passengers only been carried where there is a seat provided by manufacturers
- protection of people in a workplace
- protection from hazardous noise, mechanical vibration, and organic and other dusts
Occupational health and safety hazards may include

- exposure to loud noise and fumes, solar radiation, dust, ergonomic hazards associated with posture and vibration, hazardous substances (fuel, oils, fertilisers), oil and grease spills
- it may also include
  - the presence of bystanders
  - livestock and wildlife
  - difficult terrain and varying gradients
  - potholes
  - ditches
  - gullies
  - embankments
  - obstacles, eg, rocks, logs, fences, debris, buildings
  - extreme weather conditions
  - electricity
  - overhead powerlines
  - mechanical malfunctions and exposed moving parts
  - other machinery including hydraulics

Safe and controlled operation of machinery may include

- appropriate selection and use of machinery and equipment
- using operational techniques for the specific terrain, eg, on and off-road environments) and weather conditions
- maintaining working loads within specifications including ensuring hitch-points are operated at the correct height

Personal Protective Clothing and equipment may include

- boots
- hat/hard hat
- overalls
- gloves
- protective eyewear
- hearing protection
- respirator or facemask
- sun protection, eg, sun hat, sunscreen

Environmental implications associated with the operation of machinery and equipment may include

- negative environmental impacts which may result from
  - excessive noise and exhaust emissions
  - the incorrect use and disposal of maintenance debris, eg, oils, containers, chemical residues
  - hazardous substances, eg, fuel fertiliser
- impacts may also include run-off flows of water and cleaning agents from servicing, maintenance and cleaning activities, soil disturbance and dust problems from high speed and frequent traffic (including irrigation equipment)
Shut down procedures may include

- safe dismount procedures (including turning engine off), maintaining a clear thoroughfare, parking away from hazards, securing, engaging handbrake, removing keys, refuelling and cleaning

The sport and recreation industry covers

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered

- Assessment must confirm sufficient knowledge in the operation of machinery and equipment
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's environment
- In particular, assessment must confirm the ability to
  - select and utilise various features and controls of a range of machinery and equipment to carry out tasks
  - carry out work and maintenance plans
  - determine appropriate operating methods
  - carry out routine maintenance and basic repairs
  - report faults and workplace hazards
  - monitor operation
  - maintain records
  - demonstrate safe workplace and environmentally responsible practices
  - transfer the skills and knowledge required to operate machinery and equipment to a different work environment, e.g., this could include different machinery and equipment, workplaces and conditions of use
Interdependent assessment of units

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Nil

Required knowledge and skills

- Required knowledge
  - Manufacturers specifications for servicing of machinery and equipment
  - Operating principles and operating methods for machinery and equipment
  - Principles of weight distribution with regard to load shifting and machinery movement
  - Procedures for cleaning, securing and storing machinery, equipment and materials
  - Potential risks and hazards associated with the operation of machinery and equipment
  - Legislation, regulations and Codes of Practice with regard to workplace Occupational Health and Safety, and the use and control of hazardous substances
  - Relevant State/Territory legislation, regulations and Codes of Practice with regard to licensing, roads and traffic requirements
  - Environmental impacts and minimisation measures associated with the operation of machinery and equipment
- Required skills
  - Operate machinery and equipment to industry standards
  - Demonstrate safe and environmentally responsible workplace practices
  - read and interpret manufacturers specifications, work and maintenance plans, and Material Safety Data Sheets
  - Interpret and apply instructions, communicate with work team and supervisor, record and report equipment faults, workplace hazards, and accidents
  - Measure and calculate volumes, consumption and servicing requirements
Resource implications

• Physical resources - assessment of this competency requires access to
  • personal protective equipment
  • machinery and equipment
  • appropriate documentation and resources normally used in the workplace
• Human resources - assessment of this competency will require human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
  • be competent in this unit
  • be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
  • have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A

Consistency in performance

• Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable to the work environment

Context for assessment

• This unit of competency must be assessed in the context of a sport or recreation activity. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace
• Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes
• Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
RTC2309A Operate tractors

Unit Descriptor
This competency standard covers the operation of tractors with or without attached equipment. It requires the application of skills to safely utilise the various components and controls of tractors, check and confirm operational status, and set and secure equipment for operation. It also requires knowledge of the distinguishing characteristics of individual tractors including rated power, steering systems, and operational complexities. In addition, competence in tractor operation requires an awareness of licensing and legislative requirements, duty of care to self, others and the environment. The work in this standard is likely to be carried out under some supervision with regular checking within enterprise.

Unit Sector Horticulture

ELEMENT PERFORMANCE CRITERIA

1. Prepare tractor for operation
   1.1 Occupational health and safety hazards in the work area are identified, risk assessed and reported to the supervisor
   1.2 Routine checks of tractors are conducted prior to use according to manufacturers specifications and enterprise requirements
   1.3 Attached equipment is identified and selected appropriate to work requirements, checked for safety and set for operation
   1.4 Tractor and attached equipment faults or malfunctions are identified and reported for repair according to enterprise requirements

2. Operate tractor
   2.1 Risks to self, others and the environment are recognised and avoided according to Occupational Health and Safety and enterprise requirements
   2.2 Suitable personal protective equipment is selected, used, maintained and stored according to Occupational Health and Safety and enterprise requirements
   2.3 Tractor is operated in a safe and controlled manner and monitored for performance and efficiency
   2.4 Hazards are identified, anticipated and controlled through the application of safe and defensive driving techniques
   2.5 Environmental implications associated with tractor operation are recognised and positive enterprise environmental procedures applied where relevant

3. Complete and check tractor operation
   3.1 Shut-down procedures are conducted according to manufacturers specifications and enterprise requirements
   3.2 Malfunctions, faults, irregular performance or damage to tractor and attached equipment is detailed and reported according to enterprise requirements
   3.3 Tractor and attached equipment is cleaned and decontaminated where necessary, secured and stored according to enterprise and Occupational Health and Safety requirements
   3.4 Tractor operational reports are maintained to industry standards according to enterprise requirements
KEY COMPETENCIES

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>With regard to hazards and unsafe work practices associated with the operation of tractors may be reported to the supervisor and work team</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>With regard to tractor performance, faults and maintenance requirements may be detailed and recorded for reference and organised by reports</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Tractor operation may be planned and coordinated around work schedules</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>May be applied in the application of methods and procedures to complete operating procedures and maintain records</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>May be applied in the calculation and measurement of load and weight, servicing requirements, and distance and fuel consumption</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Breakdowns, faults or malfunctions will require arrangement for repair or replacement to achieve work schedules</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>To communicate, measure and record information with regard to maintenance, usage and performance of tractor</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

Occupational Health and Safety requirements may include safe systems and procedures for:

- the safe operation of tractors and attached equipment including the fitting of guards and shields
- hazard and risk control
- safe mounting and dismounting
- manual handling including lifting and carrying
- the application of emergency/defensive driving techniques
- handling, application and storage of hazardous substances
- outdoor work including protection from solar radiation, dust and noise
- the appropriate use, maintenance and storage of personal protective equipment
- roll over protection secured if required
- wearing a seatbelt
- passengers only being carried when there is a seat approved by manufacturer
Hazardst may include

- exposure to loud noise and fumes, hazardous substances (fuel, oils), solar radiation and organic and other dusts
- ergonomic hazards associated with posture and mechanical vibration
- bystanders
- livestock and wildlife
- difficult terrain and varying gradients
- broken ground
- potholes
- ditches
- gullies
- embankments
- obstacles
- adverse weather conditions
- electricity
- overhead hazards including
  - powerlines
  - loose clothing
  - speed and fatigue
  - load shifts
  - mechanical malfunctions
- exposed moving parts including
  - hydraulics
  - run over by tractor
  - crushed by roll-over
  - other machinery
Routine checks carried out prior to operation may include:

- cabin drills and pre-start and safety checks including:
  - an assessment of tyres
  - wheels
  - controls and cables
  - lights
  - safety mirrors
  - electrics
  - safety restraints
  - chain/driveshaft
  - chassis
  - seatbelts
  - suspension
  - power take-off equipment and guards
  - roll over protection
  - spark arrester
  - pneumatic and hydraulic systems
- checking of cooling system
- fuel
- oils and lubricants
- battery levels
- tyre pressure
- fan belts
- leads
- lines
- connections
- air filters
- air conditioning
- brakes clutch
- gearbox
- steering
- lighting and transmission
- inspection of hitch and towing points

Operational characteristics may vary in tractors where they may be:

- two wheel drive, four wheel drive, front wheel assist, articulated tractors including scrapers, track or crawler driven
- steering systems may include conventional front-wheeling steering, all wheel steering and articulated
- variational characteristics also include rated horsepower and complexities of operations and controls
Enterprise requirements applicable to this standard may include

- Standard Operating Procedures (SOPs)
- industry standards
- production schedules
- Material Safety Data Sheets (MSDS)
- work notes and plans
- product labels
- manufacturers specifications
- operators manuals
- enterprise policies and procedures including
  - waste disposal
  - recycling
  - re-use guidelines
  - supervisors oral or written instructions

Range of operations with attached equipment may be

- set up and operated for blade
- belt pulley
- drawbar
- front-end loader
- power-take-off
- remote hydraulics
- linkage mounted equipment

Risks associated with the operation of tractors may include

- tractor rollover, which may be caused by traversing a steep slope or cornering too sharply at speed
- tractor back flip which may be caused by driving off in low gear but with high engine speed, rapid acceleration (particularly when driving uphill or pulling a heavy load), attempting to drive forward when the wheels are unable to move forward (bogged), rapid engagement of the clutch of the tractor
- power-take-off entanglement (loose clothing)

Personal protective equipment may include

- boots with non-slip soles
- overalls
- seatbelts
- gloves
- protective eyewear
- hearing protection
- respirator or facemask
- sun protection, eg, sun hat, sunscreen

Safe control and operation of tractors may include

- the appropriate selection and use of tractor controls, features, settings and operational techniques for the terrain and all weather conditions without causing damage to tractor, equipment, person, property or environment
Environmental implications associated with the operation of tractors may include

- negative environmental impacts resulting from excessive noise and exhaust emissions
- the unsafe use and disposal of maintenance debris, eg, oil containers, chemical residues
- hazardous substances, eg, fuel, oils
- high traffic activity
- particularly the repeated use of tracks
- may negatively impact in soil disturbance
- dust problems and increased run-off flows from unsafe cleaning and servicing activities

Shut down procedures for tractors may include

- turning the engine off
- safe dismounting and securing the tractor
- ensuring hydraulic equipment is lowered to a safe position
- it may also include
  - parking away from hazards
  - maintaining a clear thoroughfare
  - refuelling and cleaning the tractor
  - engaging handbrake and removing keys

Relevant reports may include

- routine checks and maintenance
- scheduled maintenance activities
- mandatory or statutory inspections
- log books
- faults
- malfunctions and damage details
- hazard and incident reports

The sport and recreation industry covers

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself
EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered

- Assessment must confirm sufficient knowledge to safely operate tractors with or without attached equipment relative to operating conditions
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's work environment
- In particular, assessment must confirm the ability to
  - match and attach equipment appropriate to work requirements
  - secure loads within working specifications
  - perform routine pre-operational checks
  - recognise and control hazards and risks
  - demonstrate emergency procedures
  - monitor and maintain operational records
  - demonstrate safe workplace and positive environmental practices
  - transfer the skills and knowledge required to operate tractors to a different work environment, eg, this could include different tractors, terrain and weather conditions

Interdependent assessment of units

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Nil
Required knowledge and skills

• Required knowledge
  • Tractor components, controls and features and operational functions
  • Tractor steering systems and features
  • Attached equipment, features and operational functions and procedures
  • Operating principles and operating methods
  • Load limits and the principles of weight distribution with regard to load shifting and tractor movement
  • Effects of adverse weather and difficult terrain conditions on tractor operation
  • Environmental Codes of Practice with regard to machinery operation
  • Occupational health and safety legislative requirements, hazard identification and risk assessment
  • Relevant legislation with regard to machinery operation and licensing requirements
  • Occupational Health and Safety Codes of Practice including the use and control of hazardous substances

• Required skills
  • Steer, manoeuvre and position tractor in a smooth and controlled manner
  • Safely and effectively operate tractors in adverse weather and difficult terrain conditions
  • Demonstrate safe and environmentally responsible workplace practices
  • Interpret manufacturers specifications, work and maintenance plans, and Material Safety Data Sheets
  • Effectively communicate faults and hazards, interpret and apply task instructions, report and maintain operational records
  • Calculate and measure distance, volumes and weights

Resource implications

• Physical resources - assessment of this competency requires assess to
  • personal protective equipment
  • tractors
  • appropriate documentation and resources normally used in the workplace

• Human resources - assessment of this competency will require human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
  • be competent in this unit
  • be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
  • have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A

Consistency in performance

• Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable to the work environment
Context for assessment

- This unit of competency must be assessed in the context of sport or recreation. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace.
- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes.
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", and evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
RTC2401A Treat weeds

Unit Descriptor
This competency standard covers the process of treating weeds using cultural, biological and chemical methods. Treatment will follow strict work instructions and will be under supervision. Competency involves the application of knowledge and skills in recognising common weeds, monitoring and recording the severity of the weed problem, applying a range of treatments, and recording relevant information.

Unit Sector Horticulture

ELEMENT PERFORMANCE CRITERIA

1. Prepare to treat weeds
   1.1 Weeds which impact on commercial crops, gardens and turf, and natural areas are recognised by common name
   1.2 Details of the weed occurrence are recorded and reported to the supervisor
   1.3 Treatment methods are selected in consultation with the supervisor
   1.4 Equipment is selected and prepared for use according to enterprise guidelines and manufacturers specifications
   1.5 Occupational Health and Safety hazards are identified, risks assessed and reported to the supervisor

2. Treat weeds
   2.1 Suitable personal protective equipment (PPE) is selected, used, maintained and stored
   2.2 Treatments are prepared according to supervisor's instructions and manufacturers guidelines
   2.3 Treatments are applied in such a way that non-target damage is minimised
   2.4 Treatments are applied according to Occupational Health and Safety and regulatory requirements

3. Carry out post treatment operations
   3.1 Equipment is shut down and cleaned with full consideration of environmental impacts and Occupational Health and Safety requirements
   3.2 Treatment waste is disposed of causing minimal environmental damage
   3.3 Records are maintained according to enterprise guidelines
## KEY COMPETENCIES

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<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Relating to applying weed treatments should be discussed with other members of the work team and the supervisor</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Relating to applying weed treatments should be discussed with other members of the work team and the supervisor</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Equipment, materials and work procedures for applying treatments will need to be arranged before and between work periods, and there may be some responsibility for coordinating work with others</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>The application of treatments may involve working with other members of a team to complete the program and ensuring other activities are scheduled around the application of weed treatments</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>In relation to calculating rates, and areas, will be required</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>May be demonstrated in cases of machinery malfunctions or chemical spillage</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be applied in the preparation, use and maintenance of spray equipment</td>
<td>1</td>
</tr>
</tbody>
</table>

## RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

### Weed details
may include
- location of weeds
- area covered by the weed
- possibility of off target damage
- potential threats that the weed may present to surrounding areas

### Treatments applied
may include
- hand weeding
- herbicides
- release of biological agents
- cultivation, slashing, cutting, burning and ripping
Appropriate equipment for treatment application may include:
- backpack sprayers
- spray tanks
- fertiliser spreaders
- ladders, tractor drawn cultivation equipment, rippers
- weedicide applicators
- handsaws
- chainsaws
- brush cutters

Occupational Health and Safety hazards may include:
- use of hazardous chemicals
- use of tractors and machinery
- solar radiation
- manual handling, falls, tripping and noise

The risk of Occupational Health and Safety hazards may affect:
- workers
- equipment
- people and animals external to the workplace such as members of the public, wildlife, pets, bees, fish, birds
- the environment

Personal protective equipment (PPE) used in treatment may include:
- hat
- rubber boots
- chemical resistant overalls
- face protection
- hearing protection
- gloves
- goggles
- respirator or facemask
- sunscreen lotion

Occupational Health and Safety requirements may include:
- identifying hazards
- assessing and reporting risks
- safety procedures involved in chemical handling and use
- weather conditions, safety procedures for protecting others
- cleaning, maintaining and storing tools and equipment
- appropriate use, maintenance and storage of personal protective equipment including sun protection, drinking to avoid dehydration
- safe operation of tools and equipment
- personal hygiene and reporting problems to supervisors
Regulatory requirements may include:
- the use and disposal of chemicals
- record keeping
- transport of chemicals
- access to area
- use of chainsaws
- reporting accidents and dangerous goods

Environmental impacts may include:
- leaching and contamination of the water table
- soil contamination, spray drift
- damage to off target organisms
- contaminated produce
- surface run off, changes in soil structure

Record keeping may include:
- accident and dangerous occurrence reports
- name of operator
- treatments applied, rate, date, settings of equipment, weed numbers
- numbers of beneficial organisms

The sport and recreation industry covers:
- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself
EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered

- Assessment must confirm sufficient knowledge in treating weeds
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's environment
- In particular, assessment must confirm the ability to
  - recognised and appropriately treated common weeds
  - transfer the skills and knowledge required to treat weeds to a different work environment, eg, this could include different weed species, locations and treatment techniques

Interdependent assessment of units

- This unit must be assessed after attainment of competency of the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Nil

Required knowledge and skills

- Required knowledge
  - Recognition of common weeds for a particular enterprise/situation
  - Weed growth characteristics
  - Different types of control measures, treatments and their principles
  - Modes of action of different chemicals
  - Equipment capability and limitations
  - Legislation relation to the use of chemicals for weed control
  - Occupational Health and Safety responsibilities of employees
  - Occupational Health and Safety legislative requirements and associated hazardous substances regulations and Codes of Practice
  - Correct wearing/fit of personal protective equipment
  - Environmental considerations when using chemicals for weed control
- Required skills
  - Read and interpret chemical labels, Material Safety Data Sheets (MSDS), manufacturers specifications for setting up equipment, and maintain spray records
  - Prepare to treat weeds
  - Apply weed treatments
  - Carry out post treatment operations
Resource implications

- Physical resources - assessment of this competency requires access to
  - equipment
  - personal protective equipment
  - appropriate documentation and resources normally used in the workplace
- Human resources - assessment of this competency will require human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
  - be competent in this unit
  - be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
  - have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A

Consistency in performance

- Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable to the work environment

Context for assessment

- This unit of competency must be assessed in the context of a sport or recreation activity. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace
- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
RTC2404A  Treat plant pests, diseases and disorders

Unit Descriptor
This competency standard covers the process of treating plant pests, diseases and disorders using cultural, biological and chemical methods. Treatment will follow strict work instructions and will be under supervision. Competency involves the application of knowledge and skills in recognising common plant pests, diseases and disorders, monitoring and recording the severity of the plant pest or disease problem, applying a range of treatments, and recording relevant information.

Unit Sector
Horticulture

ELEMENT PERFORMANCE CRITERIA

1. Prepare to treat plant pests, diseases and disorders
   1.1 Plant pests, diseases and disorders which impact on commercial crops, gardens and turf, and natural areas are recognised by common name
   1.2 Details of the plant pest, disease and disorder occurrence are recorded and reported to the supervisor
   1.3 Treatment methods are selected in consultation with the supervisor
   1.4 Equipment is selected and prepared for use according to enterprise guidelines and manufacturers specifications
   1.5 Occupational Health and Safety hazards are identified, risks assessed and reported to the supervisor

2. Apply treatments to plant pests, diseases and disorders
   2.1 Suitable personal protective equipment (PPE) is selected, used, maintained and stored
   2.2 Treatments are prepared according to supervisor's instructions and manufacturers guidelines
   2.3 Treatments are applied in such a way that non-target damage is minimised
   2.4 Treatments are applied according to Occupational Health and Safety and regulatory requirements

3. Carry out post treatment operations
   3.1 Equipment is shut down and cleaned with full consideration of environmental impacts
   3.2 Treatment waste is disposed of causing minimal environmental damage
   3.3 Records are maintained according to enterprise guidelines
KEY COMPETENCIES

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Relating to applying plant pest, disease and disorder treatments should be discussed with other members of the work team and the supervisor</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information will be collected by inspecting the plant pest or disease and the information gained will be recorded and discussed with the work team and supervisor; enterprise work procedures and control programs should be consulted, interpreted and applied with clarification from the supervisor where necessary</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Equipment, materials and work procedures for applying treatments will need to be arranged before and between work periods, and there may be some responsibility for coordinating work with others</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>The application of treatments may involve working with other members of a team to complete the program and ensuring other activities are scheduled around the application of plant pest or disease treatments</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>In relation to calculating rates, and areas, will be required</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>May be demonstrated in cases of machinery malfunctions or chemical spillage</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>May be applied in the preparation, use and maintenance of spray equipment</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

Classification of plant pests, diseases and disorders may include
- chewing, sucking and boring invertebrates, nematode, fungi, viruses, and bacteria
- disorders include toxic soil, air and water
- this unit excludes vertebrae pests, nutrient deficiencies and extreme environmental conditions
Details about the plant pest or disease might include

- location and occurrence of plant pests, disease and disorders
- possibility of off target damage and potential threats that the plant pest or disease may present to surrounding areas

Treatments may include

- use of fertilisers, foliar nutrients, insecticides, fungicides, dips
- release of biological agents, pheromone traps, baits, hormones
- cultivation, slashing, cutting, burning and ripping

Equipment appropriate for treatment application may include

- backpack sprayers
- spray tanks, fertiliser spreaders
- ladders, rippers, pesticide applicators and handsaws

Occupational Health and Safety hazards may include

- use of hazardous chemicals
- use of tractors and machinery
- solar radiation
- working from ladders

Occupational Health and Safety risks may affect

- workers,
- equipment
- people and animals external to the workplace such as members of the public, wildlife, pets, bees, fish, birds
- the environment

Personal Protective Equipment required to apply treatments may include

- hat
- rubber boots
- chemical resistant overalls
- gloves
- goggles
- respirator or facemask
- sunscreen lotion
Occupational Health and Safety requirements may include

- identifying hazards
- assessing and reporting risks
- cleaning, maintaining and storing tools and equipment
- appropriate use of personal protective equipment including sun protection and drinking to avoid dehydration
- safe operation of tools and equipment
- personal hygiene and reporting problems to supervisors
- appropriate use, maintenance and storage of personal protective equipment
- safety procedures in chemical handling and use
- safety procedures for the protection of others

Regulatory requirements may include

- the use and disposal of chemicals, record keeping
- transport of chemicals, and access to area

Environmental impacts may include

- leaching and contamination of the water table
- soil contamination, spray drift
- damage to off target organisms
- contaminated produce
- surface run off, changes in soil structure

Records that need to be kept when treating plant pests, diseases and disorders may include

- name of operator
- treatments applied
- rate
- date
- settings of equipment
- plant pest’s numbers
- numbers of beneficial organisms
The sport and recreation industry covers

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered

- Assessment must confirm sufficient knowledge in treating plant pests, diseases and disorders
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's work environment
- In particular, assessment must confirm the ability to
  - recognise and appropriately treated common plant pests, diseases and disorders
  - transfer the skills and knowledge required to treat plant pests, diseases and disorders to a different work environment, eg, this could include different plant pest and diseases, locations and treatment techniques

Interdependent assessment of units

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Nil
Required knowledge and skills

- Required knowledge
  - Recognition of common plant pests, diseases and disorders for a particular enterprise/situation
  - Different types of control measures and their principles
  - Modes of action of different chemicals
  - Legislation relation to the use of chemicals for plant pest, disease and disorder control
  - Occupational Health and Safety legislative requirements and Codes of Practice
  - Correct wearing/fit of personal protective equipment

- Required skills
  - Read and interpret chemical labels, Material Safety Data Sheets (MSDS), manufacturers specifications for setting up equipment, and maintain spray records
  - Prepare to treat plant pests and diseases
  - Apply plant pest, disease and disorder treatments
  - Carry out post treatment operations
  - Wear personal protective equipment appropriate to task

Resource implications

- Physical resources - assessment of competency requires access to
  - personal protective equipment
  - equipment
  - appropriate documentation and resources normally used in the workplace

- Human resources - assessment of this competency will require human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
  - be competent in this unit
  - be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
  - have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A

Consistency in performance

- Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable to the work environment
Context for assessment

- This unit of competency must be assessed in the context of a sport or recreation activity. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace.
- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes.
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
RTC2701A Follow OHS procedures

Unit Descriptor
This competency standard covers the process of following enterprise Occupational Health and Safety (OHS) policies and procedures. It requires the ability to comply with workplace procedures in hazard identification and risk control, observe safe practices during work operations, and participate in arrangements for maintaining health and safety of all people in the workplace. Following OHS policies and procedures requires knowledge of employee and employer responsibilities under the OHS Act, enterprise procedures relating to hazards, fires, emergencies, accidents and risk control, and OHS signs and symbols relevant to area of work.

Note: The unit is based on the national guidelines for integrating OHS competencies into national industry Competency Standards.

Unit Sector No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Follow workplace procedures for hazard identification and risk control
   1.1 **Hazards in the workplace** are recognised and reported to designated personnel according to enterprise procedures.
   1.2 Assessment of risk associated with identified hazards is made in accordance with enterprise procedures.
   1.3 Workplace procedures and work instructions for controlling risks are followed accurately.
   1.4 Workplace procedures for dealing with accidents, fire and emergencies are followed whenever necessary within the scope of responsibilities and competencies.
   1.5 **Risks** to fellow workers, other people and animals are recognised, and action is taken to eliminate or reduce them.
   1.6 **Employee responsibilities** prescribed in OHS legislation are recognised and carried out.
   1.7 Safety **training** is undertaken as directed.

2. Observe safe practices during work operations
   2.1 Work for which **protective clothing or equipment** is required is identified and personal protection equipment is used, maintained and stored in accordance with enterprise procedures.
   2.2 Basic safety checks on all machinery and equipment are undertaken before operation according to enterprise procedures.
   2.3 Hazards associated with handling of hazardous substances are identified and notified, and risk assessed in accordance with enterprise **procedures** and OHS requirements.
   2.4 Noise hazards are identified and notified, and risk assessed in accordance with enterprise procedures and OHS requirements.
   2.5 **Manual handling** job risks are assessed prior to activity and work carried out according to currently recommended safe practice.
   2.6 Information on OHS is accessed as required.
3. Participate in arrangements for maintaining health and safety of all people in the workplace

3.1 Individuals have input into ongoing monitoring and reporting on all aspects of workplace safety.
3.2 OHS issues are raised with designated personnel in accordance with enterprise procedures and relevant OHS legislation.
3.3 Contributions to participative arrangements in the workplace are made within organisational procedures and scope of responsibilities and competencies.
3.4 Contributions are provided towards the development of effective solutions to control the level of risk associated with enterprise activities.

KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>By raising OHS issues verbally with supervisor and others.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>By recognising hazards, keeping maintenance records and reporting accidents and dangerous occurrences.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Following OHS procedures requires limited planning and organising.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Following OHS procedures will require participation with others in a team.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>To determine liquids and weights used in the workplace.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>To determine appropriate action in emergency.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>By the use of communication equipment to raise OHS issues.</td>
<td>1</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

What hazards in the workplace may be included?

Equipment and machinery operation and maintenance (including powered tools), vehicles, noise, chemicals, gases, manual handling, plants and animals, solar radiation, electricity, overhead hazards including powerlines, confined spaces, tripping hazards, water bodies, firearms, explosives, damaged or broken structures, damaged or worn equipment, items blocking exits, items of equipment in areas used for access, poor surfaces, and spillages and breakages.

What employee responsibilities in OHS legislation may be included in this unit?

Co-operation with the employer/supervisor in any action taken to comply with OHS legislation, taking reasonable care for own health and safety; accepting responsibility for protection of the health and safety of others through avoidance of personal action which puts others at risk. This includes smoking in the workplace, use of substances which modify mood or behaviour, inappropriate behaviour, not wilfully interfering with, or misusing anything provided to protect health and safety, not wilfully placing at risk the health or safety of any person in the workplace.

What OHS training may be relevant?

OHS induction, specific OHS training, safe machinery operation and maintenance, hazard identification and assessment, and safe chemical use.

What may constitute participative arrangements?

OHS committees and team or work group meetings.

What might be included in workplace for which protective clothing or equipment could be required?

Noise associated with plant, machinery and animals, pesticides, dusts, work in the sun, welding and use of grinders. Personal protective equipment (PPE) may include ear, eye and chemical protection, protective clothing, sunscreen lotion, safety harness, and headgear.

What could be some of the manual handling hazards?

Moving, lifting, shovelling, loading materials, pulling, pushing, up-ending materials, hand tool use, storing materials at heights too high or too low, bending, repetitious tasks, and handling plants and animals.

What risks to people and animals might be relevant?

Drowning in waterways, run over and injury associated with vehicles and machinery, machinery entanglement, exposure to noise, splash, scalding, and drift and volatility of chemicals.
What procedures may be included?  
Hazard policies and procedures, emergency policies and procedures, procedures for use of personal protective clothing and equipment, hazard identification and issue resolution procedures, job procedures and work instructions, reporting procedures, and the installation of workplace safety signage.

Which OHS emergencies may apply to this unit?  
Electrocution, fire, flood, chemical spills, storms and cyclones, gases in confined spaces, gas leaks, serious injury associated with tractors, machinery and equipment, animals, vehicles, firearms and grain suffocation.

**EVIDENCE GUIDE**

What evidence is required to demonstrate competence for this standard as a whole?  
Competence in following Occupational Health and Safety (OHS) procedures requires evidence that hazards have been recognised and reported, that relevant workplace procedures are complied with, and that contributions have been made to participative arrangements. The skills and knowledge required to follow (OHS) procedures must be transferable to a range of work environments and contexts. For example, this could include different workplaces, OHS issues, work situations and teams.

What specific knowledge is needed to achieve the performance criteria?  
Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Employee and employer responsibilities under the OHS Act.
- Enterprise procedures relating to hazards, fires, emergencies, accidents, risk control.
- OHS signs and symbols relevant to area of work.

What specific skills are needed to achieve the performance criteria?  
To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Follow workplace procedures for hazard identification and risk control.
- Ability to read safety warning signs.
- Observe safety during work operations.
- Participate in arrangements for maintaining health and safety of all people in the workplace.

Are there other competency standards that could be assessed with this one?  
This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.
Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTC2702A Observe environmental work practices

Unit Descriptor

This competency standard covers the process of observing and contributing to positive environmental work practices. It requires the ability to follow workplace directions and instructions, recognise basic environmental hazards and threats and communicate accurately with supervisors and workplace colleagues, and keep simple records. Observing environmental work practices requires awareness of relevant environmental legislation, policies and workplace/industry practices, approaches to improving environmental performance, and environmental issues (especially in regard to water catchments, air, noise, ecosystems, habitat, efficient use of resources, sustainability and waste minimisation).

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Follow environmental workplace practices
   1.1 Workplace practices and work instructions relating to potential environmental impacts are recognised and followed, and clarification is sought where necessary.
   1.2 Changes to work practices and procedures are responded to positively and promptly in accordance with enterprise requirements.
   1.3 Relevant legislation, codes and national standards that impact on workplace environmental practices are recognised and followed.

2. Contribute to improved environmental work practices
   2.1 Suggestions are made to designated personnel for improvements to workplace practices where possible.
   2.2 Information is gathered and improvements are suggested to support the development of improved workplace approaches to environmental practices.
   2.3 Environmental issues and their relationship to workplace practices are discussed in the workplace with colleagues and designated personnel.
   2.4 Contributions to the review of environmental practices and policies are made within limits of responsibility.

3. Recognise and report on a potential environmental threat
   3.1 Signs or symptoms of the potential environmental threat are recognised.
   3.2 Information about or observations of a potential environmental threat are reported to supervisors and/or appropriate authorities.
   3.3 Location and extent of the potential environmental threat is accurately recorded.
   3.4 Reports on the potential environmental threat are completed according to enterprise guidelines.

4. Maintain environmental records
   4.1 Environmental records are accurately prepared as required according to enterprise policies and procedures.
   4.2 Environmental records are stored securely in a form accessible for reporting purposes.
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Verbally with supervisor and others on environmental work practices and potential hazards and risks.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Through maintaining and analysing environmental records.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>According to enterprise environmental and work place practices and policies.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Through working with others to follow and improve environmental practices.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Through quantification (e.g., counting, estimating areas) of environmental hazards or problems and through collection of data.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Through recognition of and responses to environment hazards and risks, and determining ways that work practices can be more environmentally friendly.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be required to record information, deal with environmental hazards, and improve work practices to be more environmentally friendly.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

What does recognise and follow mean?

That a person will acknowledge that environmental impacts, hazards and risks exist and that they have a responsibility to work in a manner which will minimise the impact on the environment within the guidelines established by the workplace.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What might environmental workplace procedures and work instructions include?</td>
<td>These could include written procedures or work instructions for environmental hazard and risk identification, avoiding or minimising environmental risks, improving environmental performance, waste minimisation and segregation, environmental monitoring, signs and labels (e.g., chemical labels), emergency procedures, hazard and incident recording and reporting procedures, and environmental data recording and reporting procedures where applicable. Verbal instructions from persons with responsibility related to environmental work practices are also included in this definition.</td>
</tr>
<tr>
<td>What legislation, codes and national standards may be relevant to this competency standard?</td>
<td>Award and enterprise agreements, relevant environmental legislation from all levels of government, Australian standards, international agreements and relevant industry Codes of Practice.</td>
</tr>
<tr>
<td>What environmental threats and hazards may be included in this competency standard?</td>
<td>These could include spills, leaks, pollution, planned and unplanned emissions, soil compaction, disturbance and erosion, accidents and disposal of waste, and damage or disruption to ecosystems resulting from work practices. Also includes plants, animals or diseases that are classified as an environmental threat or problem in an area, unauthorised changes in land use, fire risks and threats, and inappropriate human interaction on the environment. This may include damage to habitat resources, disruption of animal behaviour and territorial use, illegal vegetation clearance, seed collection, firewood gathering, nest disturbance and egg collecting.</td>
</tr>
<tr>
<td>Who are designated personnel in a workplace?</td>
<td>Managers, supervisors, and people who are responsible for work area or who may be assigned to act as a mentor/trainer to a person under instruction.</td>
</tr>
<tr>
<td>What suggestions may be included?</td>
<td>Ideas to minimise hazards and risks, reduce waste, make more efficient use of resources and improve environmental performance, reduce soil disturbance and improve habitat resources.</td>
</tr>
<tr>
<td>What workplace approaches to environmental practices may be relevant to this competency standard?</td>
<td>Preventing and minimising the production of pollution (e.g., discharges to air, land and water, hazardous waste, reducing ‘burning off’, composting, recycling materials, conservation practices), and improving workplace maintenance practices (e.g., using a broom instead of a hose, using environment-friendly cleaning agents).</td>
</tr>
<tr>
<td>What environmental issues are included in this competency standard?</td>
<td>Sustainability, reduction and disposal of waste, water quality, energy efficiency, biodiversity and habitat protection, conservation of natural resources, air quality, land contamination, noise, soil and salinity management and fire management.</td>
</tr>
<tr>
<td>What may be listed under environmental policies?</td>
<td>Waste minimisation and management, sustainability, local, regional, state and national strategies on weed and pest management, protection of land and habitat and conservation of resources, energy use, greenhouse gas emissions, use of chemicals and plant and equipment.</td>
</tr>
</tbody>
</table>
What may be listed as signs or symptoms of a potential environmental threat?

Observation of the presence of weeds, pest animals or chemicals; damage caused to plants, animals or the environment, changes in plant (e.g., dieback of trees) and animal health, erosion of soils, soils in water suspension, and presence of salt.

How may a report be made?

Verbally (face-to-face or through communication equipment) and in writing (notes, faxes, email or electronic messages).

What environmental records may be included?

Environmental data, maintenance and inspection reports, incident or accident reports, and complaints from the public.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in observing environmental work practices requires evidence that skills and knowledge have been successfully and appropriately applied and demonstrated in a work place or equivalent situation. The skills and knowledge required to observe environmental work practices must be transferable to a range of work environments and contexts. For example, this could include different workplaces, environmental hazards and risks, and workplace practices and procedures.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Relevant legislation from all levels of government on environmental issues.
- Relevant environmental policies and workplace/industry practices and procedures.
- Good practice approaches relevant to work area particularly in regard to minimising environment hazards and risks, and improving environmental performance.
- Environmental issues, especially in regard to water catchments, air, noise, ecosystems, habitat, efficient use of resources, sustainability and waste minimisation.
- Potential environmental threats and problems relevant to a given region and occupation.
- General work place practices and their potential impact on the environment.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Communicate with supervisors and workplace colleagues.
- Recognise basic environmental hazards and threats.
- Follow workplace directions and instructions.
- Keep simple records.
Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTC2704A Provide basic first aid

Unit Descriptor
This competency standard covers the process of providing essential first aid in recognising and responding to an emergency using basic life support measures. The first aider is not expected to deal with complex casualties or incidents, but to provide an initial response where first aid is required. The first aider will generally be working under supervision. It requires the ability to respond positively to emergencies in line with practised actions and demonstrate basic first aid casualty management principles. Providing basic first aid requires knowledge of the use of safe working practices, the emergency network, and first aid casualty management principles.

Note: This competency standard can be acquired through completion of St John's Basic Life Support (Level 1), the Australian Red Cross' Essential First Aid or other equivalent one-day programs.

Unit Sector
Business Management Services

ELEMENT PERFORMANCE CRITERIA

1. Assess the situation
   1.1 Emergency situation is recognised.
   1.2 Physical hazards to personal and others health and safety are identified.
   1.3 Immediate risk to self and casualty's health and safety are minimised by isolating the hazard.
   1.4 The casualty's physical condition and vital signs are assessed.

2. Apply basic first aid techniques
   2.1 Casualty is reassured in a caring and calm manner and made comfortable using available resources.
   2.2 First aid care is provided in accordance with established first aid procedures.
   2.3 First aid assistance is sought from others as appropriate.
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Verbally including through communication systems.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Observation and reporting to supervisor or appropriate authorities.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>According to Occupational Health and Safety practices and policies.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Through reacting to emergency situations in a coordinated way.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Calculating pulse rates.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Identifying solutions to preserve life or counteract emergencies.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Use of communications equipment</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

What emergency situations that impact on the operation may be included in this unit?

- Fire, fuel spillage, anhydrous ammonia emergencies and chemical spillage. Emergency situations can also arise due to trauma, e.g., road accidents, snakebite or poisoning, respiratory or cardiac arrest, and electrocution.

What may be included as hazards?

- Proximity of other people, lack of oxygen, vehicles and machinery, fire, gas, fume and electrical situations.

What maladies might be relevant to this standard?

- Bleeding and shock, burns, fits, choking, heart attack, fractures, poisoning and drowning.
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in providing basic first aid requires evidence that an individual has the skills and knowledge to recognise and respond to an emergency using basic life support measures. The skills and knowledge required to act to provide basic first aid must be transferable to a range of work environments and contexts. For example, this could include different workplace environments and signs and symptoms requiring attention.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- The use of safe working practices.
- The emergency network.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Respond positively to emergencies in line with practised actions.
- Apply first aid casualty management techniques.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
RTC2705A Work effectively in the industry

Unit Descriptor

This competency standard covers the process of working effectively on an individual basis and with others. It requires the ability to obtain information about the industry, observe employment requirements, accept responsibility for quality of own work, maintain safety of self and others, participate in workplace teams, and follow work schedules. Working effectively in the industry requires knowledge of industry/workplace awards and conditions, employer expectations, relevant legislation and Codes of Practice applying to the industry, OHS policies and procedures, workplace policies and procedures, emergency procedures, organisational structure, and workplace communication channels.

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Obtain information about the industry
   1.1 Sources of information about the industry are correctly identified and accessed.
   1.2 Information to assist effective and safe work performance within the industry is collected.
   1.3 Specific information on sector of work is obtained and updated.
   1.4 Industry and OHS information is correctly applied to day-to-day work activities.
   1.5 Employment terms and conditions are defined.
   1.6 Career pathways within the industry are identified.

2. Observe employment requirements
   2.1 Industry developments are used in workplace context to improve quality, productivity and conditions.
   2.2 Work practices comply with Codes of Practice and workplace expectations.
   2.3 Faults and abnormalities in workplace practices are recognised and remedial action is taken to enterprise requirements.
   2.4 Dress and personal requirements comply with workplace standards.
   2.5 Punctuality in work attendance is observed.
   2.6 Employers expectations are met through completion of workplace routines and specific instructions within enterprise policies and procedures.

3. Accept responsibility for quality of own work
   3.1 Personal work space is kept in a well organised and safe condition, and is in accordance with relevant standards and policies.
   3.2 Workplace code of conduct is adhered to.
   3.3 Variations in the quality of service and/or products from required standards are detected and reported in accordance with workplace procedures.
## 4. Plan own work

4.1 Instructions are interpreted correctly and observed.
4.2 **Factors affecting work requirements** are identified and appropriate action is taken.
4.3 Work load is assessed and prioritised within allocated timeframes.
4.4 The need for assistance to improve performance is communicated clearly to the appropriate person.

## 5. Promote workplace co-operation

5.1 Responsibilities and duties are undertaken in a positive manner to promote co-operation and good relationships.
5.2 Co-operation with others is conducted in a courteous manner and is appropriate to culture, **special needs** and linguistic background and position in the organisation.
5.3 Problems and conflict are recognised and resolved, where possible, through personal communication and/or are referred to a supervisor, manager or employer for resolution.

## 6. Contribute to a productive work environment

6.1 Commitments to undertake work or assist colleagues/co-workers are fulfilled.
6.2 Information relevant to work is shared with colleagues/co-workers to ensure designated work goals are met.
6.3 Knowledge and skills are shared with colleagues/co-workers through conversations and meetings.
6.4 Contribution of individuals of different gender and social and cultural backgrounds is recognised and sought.
6.5 The principles of equal employment opportunity are observed and implemented.
6.6 Work is consistent with workplace standards relating to anti-discrimination and workplace harassment.

## 7. Undertake an activity to workplace requirements

7.1 Interpretation of work schedules is consistent with the schedule and tasks defined.
7.2 Knowledge and skills required for task are discussed with supervisors and co-workers.
7.3 Availability of materials and equipment are checked to ensure they are consistent with work schedules and the requirements of the tasks.
7.4 A daily schedule for completing **workplace activities** and allocated tasks including priorities, allocated start times, estimation of completion times and materials, equipment and assistance required for completion is decided upon.
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Verbally with supervisor and others using enterprise terminology relating to work conditions.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Working effectively in the industry will require basic information to be gathered and organised accordingly.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Working effectively in the industry requires limited planning and organising.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Working effectively in the industry will require participation with others in a team.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Not Applicable.</td>
<td>-</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems requiring simple solutions may arise.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be required to obtain and record information.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

What information about the industry may be relevant to this standard?
Different sectors of the industry and the services available in each sector, relationship between sectors and other industries, industry working conditions including OHS hazards, legislation that affects the industry, industrial relations issues and major organisations, career opportunities within the industry, work ethic required to work in the industry and industry expectations of staff, and quality assurance.

What terms and conditions may be included in this unit?
Workplace agreements, relevant union bodies, relevant awards, employment contracts and workplace requirements and etiquette.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What legislation may be relevant to those working in the industry?</td>
<td>OHS, workplace relations, workers compensation, consumer protection and trade practices, duty of care, building regulations, hygiene, equal employment opportunity (EEO), and anti-discrimination.</td>
</tr>
<tr>
<td>How might industry developments be relevant?</td>
<td>Implications of technology changes on employment, industry environment, and changes in market conditions.</td>
</tr>
<tr>
<td>What may be seen as factors affecting work requirements?</td>
<td>Time and weather contingencies, other work demands</td>
</tr>
<tr>
<td>What types of workplace change might be relevant to this standard?</td>
<td>Implementation of new work practices and services, enterprise restructuring, introduction of new technology or communication systems, and changes in staff numbers and individuals.</td>
</tr>
<tr>
<td>What can be defined as special needs?</td>
<td>People with a disability, children, elderly people, and people from non-English speaking background.</td>
</tr>
<tr>
<td>What policies and procedures may be relevant to this standard?</td>
<td>Quality system policies and procedures, environmental policies, OHS policies and procedures including accident reports, responsibilities and duties</td>
</tr>
<tr>
<td>What workplace activities may be included in this unit?</td>
<td>Daily routines, periodic routines and ad hoc activities.</td>
</tr>
<tr>
<td>What sorts of action may be relevant to this unit?</td>
<td>Reporting, rectifying faults, and prevention of damage.</td>
</tr>
<tr>
<td>What sources of information are relevant to this standard?</td>
<td>Media, reference books, libraries, unions, industry associations, industry journals, internet sites, personal observation and experience.</td>
</tr>
</tbody>
</table>
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in working effectively in the industry requires evidence that skills and knowledge to work effectively in the industry have been successfully demonstrated in a workplace or equivalent situation. The skills and knowledge required to working effectively in the industry must be transferable to a range of work environments and contexts.

For example, this could include different workplaces, groups of co-workers, and within enterprise policies and procedures.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Industry/workplace awards and conditions.
- Employer's expectations.
- Relevant legislation and Codes of Practice applying to the industry.
- OHS policies and procedures.
- Workplace policies and procedures including those relating to quality systems.
- Emergency procedures.
- Organisational structure.
- Workplace communication channels.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Collate information on the industry.
- Observe employment requirements.
- Accept responsibility for quality of own work.
- Manage own work.
- Maintain safety of others.
- Promote workplace co-operation.
- Contribute to a productive work environment.
- Interpret work schedules.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
# RTC2706A Apply chemicals under supervision

## Unit Descriptor
This competency standard covers the process of applying chemicals and biological agents for the control of weeds, pests and diseases using workplace specific application equipment. The work functions in this standard will be carried out under supervision. A thorough knowledge and the application of safety procedures and regulations when using chemicals is required.

NB: This competency standard may be deemed to have a time limit when used as part of an accreditation or licence to purchase or use chemicals

### Unit Sector
Horticulture

## ELEMENT PERFORMANCE CRITERIA

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Follow instructions to check and maintain application and personal protective equipment | 1.1 Pre and post operational checks and maintenance on application equipment are carried out according to manufacturers specifications and enterprise procedures  
1.2 Application and personal protective equipment are prepared and adjusted for use appropriate to the situation and in accordance with Occupational Health and Safety requirements  
1.3 Instructions are followed to identify and maintain damaged, non-functioning or worn equipment  
1.4 Occupational Health and Safety hazards are identified and reported to the supervisor |
| 2. Use application and personal protective equipment | 2.1 Chemical label is interpreted  
2.2 Application and personal protective equipment appropriate to the task are recognised and used, maintained and stored according to enterprise procedure and Occupational Health and Safety requirements  
2.3 Measurement and decanting of substances comply with directions  
2.4 Safe working practices relevant to the situation are followed  
2.5 Procedures in the event of a chemical spill are identified and followed |
| 3. Apply chemicals | 3.1 Hazards are identified and associated risks recognised  
3.2 Requirements for application equipment to accurately and effectively apply the required dose of the chemical to the target are followed  
3.3 Safe working practices relevant to the situation are followed |
| 4. Follow instructions to empty and clean equipment and containers according to directions | 4.1 Instructions for clean-up are identified  
4.2 Equipment and clean up methods using appropriate tools are followed  
4.3 Instructions for disposal of containers and unused chemicals or biological agents are identified |
| 5. Complete chemical records | 5.1 Chemical inventory is recorded as instructed and as required by regulations  
5.2 Chemical application details are reported as instructed and as required by regulations |
6. Transport, handle and store chemicals according to instructions and legislative requirements

6.1 Transport, handling and storage requirements for chemicals used are recognised and followed

6.2 Requirements for storage of chemicals at the workplace are recognised and followed

**KEY COMPETENCIES**

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Information about chemicals and how they will be applied and recorded may be communicated to work colleagues or the supervisor</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information may be collected and analysed from chemical labels, Material Safety Data Sheets, operator manuals or from Codes of Practice and advisory materials outlining regulations relevant to chemical use</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Recognising and using equipment, application and cleaning up of chemicals will require coordination of activities</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Applying chemicals with others in workplace or in conjunction with other team functions</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Correctly measuring volume of chemical to apply, recording information and working out time periods before work can continue in the area</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Taking action concerning faulty equipment may require problem solving</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Recording information may require technology to be used</td>
<td>1</td>
</tr>
</tbody>
</table>

**RANGE STATEMENT**

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

**Pre and post operational checks**

- weather conditions, eg, wind
- nozzles
- hoses
- regulators/gauges
- respirator cartridges
- drench
- protective clothing and equipment
Application equipment may include
- Knapsacks or hand held pneumatic sprayers
- Drench guns
- Spot on applicators
- Syringes
- Other equipment relevant to the workplace

Personal protective equipment may include
- Boots
- Overalls
- Chemical resistant gloves
- Aprons
- Face shields
- Respirators or hats

Chemicals may include
- Herbicides
- Insecticides
- Fungicides
- Algaecides
- Growth regulators
- Growth promotants
- Bio-agents or vaccines
- Excludes application of S6 and S7 chemicals

Safe working practices may include
- Procedures for handling, transporting and storing chemicals
- Selecting and using personal protective clothing and equipment
- Safe operation of machinery and equipment
- Safe procedures for applying chemicals and following manufacturers instructions

Legislation or regulations may include
- Pesticides Acts
- Occupational Health and Safety Acts and associated Hazardous Substances Regulations / Codes of Practice
- Dangerous Goods Acts
- Poisons Schedules or Protection of the Environment Acts

Procedures in the event of a spill may include, according to the label,
- Material Safety Data Sheets (MSDS) or legislation
Hazards will be listed

- on labels and the Material Safety Data Sheets for the chemical concerned and may include
  - flammability
  - toxicity
  - health hazards
  - damage to non-target organisms
  - environmental damage or residues in food or feedstuffs

Tools may include

- hand tools
- measuring jugs and cylinders
- scales
- syphoning equipment
- drum rinse
- batching tank

Application details such as

- time
- date
- quantity and type of chemical
- weather
- application equipment
- host and pest
- accidents or dangerous occurrences may be recorded or must be recorded where required by legislation

The sport and recreation industry covers

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself
EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered

- Assessment must confirm sufficient knowledge apply chemical under supervision
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's work environment
- In particular, assessment must confirm the ability to
  - use the correct equipment
  - apply the chemical correctly
  - record application
  - identify safety hazards and how to avoid them
  - interpret and follow directions
  - transfer use of chemicals in one workplace to another workplace, eg, if a chemical is applied under close supervision on a property growing grain crops, it should be evident that a chemical could be applied on a property where fruit is grown following induction to the new workplace

Interdependent assessment of units

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Nil
Required knowledge and skills

- Required knowledge
  - Environmental effects of selected chemicals and how to minimise damaging effects of chemicals
  - Different broad chemical types, e.g., insecticides, herbicides and fungicides and their mode of action symbols on the label
  - Principles of Integrated Pest Management
  - Paths of entry of poisons into the body and methods of limiting exposure
  - Methods of minimising risk during application
  - Personal protective equipment and how, when and why it should be used and stored
  - Maintenance of personal protective equipment
  - Relevant State or territory legislation, regulations and Codes of Practices with regard to hazardous substances of the use of chemicals
  - Occupational Health and Safety concerning personal safety and safety of others in the workplace
  - Use of chemicals as one tool of pest management
  - Possible effects on health of bystanders/public in addition to applicators
  - Weather conditions and means of assessing them in line with risks, and recognising when they become unsuitable for application to continue
  - Correct wearing/fit of personal protective equipment

- Required skills
  - Work using a variety of chemical application tools and pieces of equipment that are suitable for the particular application task using safe and environmentally responsible work practices
  - Accurately interpret labels, record relevant information and measure application amounts
  - Respond to emergencies and apply first aid in the event of pesticide poisoning

Resource implications

- Physical resources - assessment of this competency requires access to
  - personal protective equipment
  - tools
  - appropriate documentation and resource normally used in the workplace
- Human resources - assessment of this competency will require human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
  - be competent in this unit
  - be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
  - have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A
Consistency in performance

- Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable to the work environment.

Context for assessment

- This unit of competency must be assessed in the context of a sport or recreation activity. For valid and reliable assessment, the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace.
- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes.
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
### RTC2801A Participate in workplace communications

**Unit Descriptor**

This competency standard covers the process of effectively participating in workplace communications. It requires the ability to follow simple spoken messages, perform routine workplace duties, follow simple written notices, obtain and provide information in response to workplace requirements, complete relevant work related documents, and participate in workplace meetings and discussions. Participating in workplace communications requires an understanding of different modes of communication, basic mathematical processes, and knowledge of communication procedures and systems and technology relevant to the enterprise and the individual's work responsibilities.

**Unit Sector**

No Sector Assigned

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#### ELEMENT PERFORMANCE CRITERIA

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Follow routine spoken messages</td>
<td>1.1 Required information is gathered by listening, and is correctly interpreted.</td>
</tr>
<tr>
<td></td>
<td>1.2 Instructions/procedures are followed in appropriate sequence for tasks and in accordance with information received.</td>
</tr>
<tr>
<td></td>
<td>1.3 Clarification is sought from workplace supervisor on all occasions when any instruction/procedure is not understood.</td>
</tr>
<tr>
<td>2. Perform workplace duties following routine written notices</td>
<td>2.1 Written workplace notices and instructions are read and interpreted correctly.</td>
</tr>
<tr>
<td></td>
<td>2.2 Routine written instructions/procedures are followed in sequence.</td>
</tr>
<tr>
<td></td>
<td>2.3 Clarification is sought from workplace supervisor on all occasions when any instruction/procedure is not understood.</td>
</tr>
<tr>
<td>3. Obtain and provide information in response to workplace requirements</td>
<td>3.1 Specific, relevant information is obtained.</td>
</tr>
<tr>
<td></td>
<td>3.2 Important information is interpreted correctly.</td>
</tr>
<tr>
<td></td>
<td>3.3 Information is written completely, accurately and legibly.</td>
</tr>
<tr>
<td></td>
<td>3.4 Sources of required information are identified and appropriate contact established.</td>
</tr>
<tr>
<td></td>
<td>3.5 Personal interaction is courteous and inquiries carried out clearly and concisely.</td>
</tr>
<tr>
<td></td>
<td>3.6 Defined workplace procedures for the location and storage of information are used.</td>
</tr>
<tr>
<td>4. Complete relevant work related documents</td>
<td>4.1 Range of forms relating to conditions of employment are completed accurately and legibly.</td>
</tr>
<tr>
<td></td>
<td>4.2 Workplace data is recorded on standard workplace forms and documents.</td>
</tr>
<tr>
<td></td>
<td>4.3 Basic mathematical processes are used for routine calculations.</td>
</tr>
<tr>
<td></td>
<td>4.4 Errors in recording information on forms/documents are identified and rectified.</td>
</tr>
<tr>
<td></td>
<td>4.5 Reporting requirements to supervisor are completed according to enterprise guidelines.</td>
</tr>
</tbody>
</table>
5. Participate in workplace meetings and discussions

5.1 Team meetings are attended on time.
5.2 Own opinions are clearly expressed and those of others are listened to without interruption.
5.3 Meeting inputs are consistent with the meeting purpose and established protocols.
5.4 Workplace interactions are conducted in a courteous manner appropriate to cultural background and authority in the enterprise procedures.
5.5 Questions about simple routine workplace procedure and matters concerning conditions of employment are asked and responded to.
5.6 Meeting outcomes are interpreted and implemented.

KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>By discussion with supervisor and others.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>By obtaining various workplace documents and processing them accordingly.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Participating in workplace communications requires limited planning and organising.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Participating in workplace communications will require participation with others in a team.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical ideas and techniques can be applied by calculating and recording workplace information.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>In emergencies or communication breakdown, technical problems may arise requiring simple solutions.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Equipment such as calculators, computers, telephones and radios may be required to communicate and calculate.</td>
<td>1</td>
</tr>
</tbody>
</table>
**RANGE STATEMENT**

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

<table>
<thead>
<tr>
<th>What types of notices may be relevant to this unit?</th>
<th>Instructions, labels, symbols, signs, tables, simple graphs, personnel information, notes, rosters, safety material, dockets with customer/client details, messages, enterprise specific data, and industry network details.</th>
</tr>
</thead>
<tbody>
<tr>
<td>What other contact may be included?</td>
<td>Suppliers, industry bodies, local government, regulatory bodies, trade personnel, training personnel, contractors and advisers.</td>
</tr>
<tr>
<td>How should interaction with others be conveyed?</td>
<td>Efficiently, effectively, responsively, courteously and supportively, using correct forms of greeting, identification and address as required, and presenting the enterprise in a positive way.</td>
</tr>
<tr>
<td>What forms of data storage may be included?</td>
<td>Manual or computer based filing systems.</td>
</tr>
<tr>
<td>What workplace forms may be included?</td>
<td>Personnel forms, telephone message forms, safety reports and work rosters.</td>
</tr>
<tr>
<td>What different types of work groups and teams does this standard apply to?</td>
<td>Formal and informal groups/teams, small and large groups/teams and teams based on work function, level of supervision, work rosters or other.</td>
</tr>
<tr>
<td>What routine workplace measures may be included?</td>
<td>Estimates and calculations of pay, leave entitlements, workplace allowances, materials usage, product characteristics (length, weight, capacity, time, temperature, stock numbers and age), product tallies, and packing and storing of stock/product.</td>
</tr>
<tr>
<td>What are defined as basic mathematical processes?</td>
<td>Addition, subtraction, multiplication and division.</td>
</tr>
<tr>
<td>What meeting protocols may be included?</td>
<td>Observing meeting convention, compliance with meeting decisions, and obeying meeting instructions.</td>
</tr>
<tr>
<td>What industry standards for workplace interaction may be specified?</td>
<td>Courtesy requirements, discretion, confidentiality, and structured follow-up procedures.</td>
</tr>
<tr>
<td>What workplace interactions may be relevant to this standard?</td>
<td>Verbal discussions including face to face, telephone, electronic and two-way radio, written including electronic, memos, instructions and forms, and non-verbal including gestures, signals, signs and diagrams.</td>
</tr>
</tbody>
</table>
What enterprise requirements may be relevant?

Clear and concise organisation, defined procedures for storage, and accurate and legible recording.

What personal presentation standards may be included?

Dress requirements for personal safety in the working environment, the wearing or use of personal protective equipment, personal and workplace hygiene and personal presentation for safety, e.g., the need to cover long hair or remove jewellery.

Which forms of communication may be relevant?

Face to face, telephone, written means, computers, e-mail, facsimile, 2-way radio, mobile phone, attendance at industry forums, paging systems and answering machines.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Participating in workplace communications in the workplace requires evidence that effective communications have been carried out according to the elements and performance criteria in this competency standard and according to workplace guidelines and procedures. The skills and knowledge required participate in workplace communications must be transferable to a range of work environments and contexts. For example, this could include different workplaces, types of communication and work teams.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Effective communication.
- Different modes of communication.
- Written communication.
- Effective communication in a work team.
- Communication procedures and systems, and technology relevant to the enterprise and the individual's work responsibilities.
- OHS legislative requirements and Codes of Practice.
What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Follow simple spoken messages.
- Perform routine workplace duties following simple written notices.
- Gather and provide information in response to workplace requirements.
- Complete relevant work related documents.
- Estimate, calculate and record routine workplace measures.
- Basic mathematical processes of addition, subtraction, division and multiplication.
- Estimation processes.
- Participate in workplace meetings and discussions.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTC3016A Provide information on plants and their culture

Unit Descriptor

This competency standard covers the process of providing information to clients and others about plants and their cultural requirements. The provision of information is likely to be under limited supervision from others with checking only related to overall effectiveness. The provision of information requires the application of extensive horticultural knowledge and a broad range of plant-related skills. The provision of information is normally done within routines, methods and procedures where some discretion and judgement is required.

Unit Sector

Horticulture

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify the issue</td>
<td>1.1 Contact is initiated with the <strong>client</strong>, when appropriate, according to <strong>enterprise work procedures</strong></td>
</tr>
<tr>
<td></td>
<td>1.2 The client is assisted in explaining the <strong>issue</strong> by the use of attentive listening and questioning techniques according to enterprise work procedures</td>
</tr>
<tr>
<td></td>
<td>1.3 The nature of the issue is clarified by gathering all relevant <strong>information</strong> from the client according to enterprise work procedures</td>
</tr>
<tr>
<td></td>
<td>1.4 The issue is defined according to <strong>researched and experimental awareness</strong> and enterprise work procedures</td>
</tr>
<tr>
<td>2. Decide on preferred solution</td>
<td>2.1 Options and/or strategies are identified and devised according to researched and experimental awareness, and enterprise work procedures</td>
</tr>
<tr>
<td></td>
<td>2.2 Options and/or strategies are examined and evaluated according to sound problem-solving techniques and enterprise work procedures</td>
</tr>
<tr>
<td></td>
<td>2.3 The optimal solution is determined based on reasoned argument, appropriate evidence, sound cultural principles, and enterprise work procedures</td>
</tr>
<tr>
<td>3. Provide the preferred solution</td>
<td>3.1 The recommended solution, method of application and probable outcomes are clearly explained to the client according to enterprise work procedures</td>
</tr>
<tr>
<td></td>
<td>3.2 The original source of the plant and its cultural requirements is referred to where necessary</td>
</tr>
<tr>
<td></td>
<td>3.3 Client requests for clarification or expansion are responded to by the use of attentive listening and questioning techniques according to enterprise work procedures</td>
</tr>
<tr>
<td></td>
<td>3.4 Recommendations are recorded and reports are made to the supervisor according to enterprise work procedures</td>
</tr>
<tr>
<td>Key Competency</td>
<td>Example of Application</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Communicating ideas and information</td>
<td>Written, oral and telecommunication of ideas and information relating to the horticultural issue and the recommended solution will be required with the client, work group, supervisor and industry contacts</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Enterprise work procedures, customer service standards and resources should be consulted, interpreted and applied to coordinate client service and information delivery about plants, products and treatments, with further clarification sought from the supervisor when necessary</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Own work activities, in coordination with the work team, will be planned prior to and adjusted during client service work periods</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>The provision of information to clients may require coordination and consultation with team members to deliver effective and accurate information to the client satisfaction</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical application will be required to calculate area, quantities, volumes and application rates for plants, products and treatments</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problem-solving techniques will be required to satisfy the clients needs, inadequate knowledge in an area of customer query and inadequate plants, products or treatments available within the specific enterprise to meet client needs, will also require problem-solving techniques</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technological understanding will be required to access and apply information about plants, products and treatments to meet clients needs, communicate with clients and others, and keep records</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

Client may include
- general public
- customers
- clients
- community groups
- staff members
- industry counterparts

Enterprise work procedures may include
- supervisors oral and written instructions
- enterprise policy and guidelines
- enterprise Standard Operating Procedures (SOP)
- specifications
- routine maintenance schedules
- work notes
- products labels and Material Safety Data Sheets (MSDS)
- manufacturers service specifications and operators manuals
- waste disposal, recycling and re-use guidelines
- Occupational Health and Safety procedures

Issues may include
- weeds
- pest and disease control measures
- selection and use of plant materials
- basic design and maintenance
- soils
- irrigation
- plant nutrition
- products and services
- local geographical variables
- habitat and conservation use
- bush restoration
- other plant cultural information
Information may include

- soil characteristics
- proximity of plantings and structures to buildings
- plant positioning
- material types
- origin of the plant
- environment and environmental threats
- watering regime
- propagation techniques
- seed collection methods
- habitat and conservation value
- natural and assisted regeneration
- drainage
- cultural practices

Researched and experimental awareness knowledge of species and its culture may be increased through

- consultation with team members
- supervisor
- own knowledge
- specific literature
- supplier specifications
- local historical performance data
- industry best practice guidelines

Resources may include

- enterprise or public library
- horticultural and land management-related business and research organisation websites
- industry consultants
- suppliers and contractors
- enterprise supervisor and team colleague experience
- experts in the local area or industry sector

The sport and recreation industry covers

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself
EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered

- Assessment must confirm sufficient knowledge in providing information on plants and their culture
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's work environment
- In particular, assessment must confirm the ability to
  - respond positively and actively to client requests with information and recommendations
  - provide active listening and questioning techniques to ensure that the plant and cultural information supplied are appropriate to the clients needs
  - transfer the skills and knowledge required to provide information on products plants and treatments to a different work environment, eg, this could include different plants, cultural practices, environments and requests for information

Interdependent assessment of units

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Competencies relevant to the job function
Required knowledge and skills

- Required knowledge
  - Broad range of plant species and their cultural relevant to the workplace
  - Awareness of legal issues, Occupational Health and Safety issues and requirements, and environmental implications, regulations and cultural sensitivities of clients
  - Problem-solving techniques
  - Plant identification techniques and basic physiology, habit and growth characteristics of the plants specific to the enterprise
  - Soil characteristics, particularly in relation to the geographical and climatic region from which clients generally originate
  - Pest and disease symptoms, basic physiology and life cycle of pests and diseases, vulnerable plant growth stages, treatment thresholds, treatment products, effective application procedures and environmental implications
  - Weed species, growth stages, treatment thresholds, treatment products, effective application procedures and environmental implications
  - Local plant suppliers, consultants, services, products and contractors
  - Awareness of duty of care in provision of advise and recommendations to retail, commercial and private clients

- Required skills
  - Communicate with clients, work team members, supervisors, suppliers, contractors and consultants
  - Interpret information sheets, labels, horticultural literature, specifications and design symbols
  - Utilise proforma reporting and work procedure documents
  - Estimate treatment and product requirements, material sizes and quantities
  - Interpret site designs, ground plans and specifications
  - Calculate ratios, proportions and application rates
  - Coordinate own work activities to gain knowledge about plants, products and treatments
  - Investigate client requests for information, identify and evaluate options, decide on a solution, and deliver recommendation and information to the client
  - Provide customer service to satisfy the clients need for information
  - Research and access information
  - Inform the client of any recommended solution using verbal explanations, available audio-visual or multimedia materials, literature, and demonstrations of the solution offered by a plant, product or treatment
Resource implications

- Physical resources - assessment of this competency requires access to
  - appropriate documentation and resources normally used in the workplace
- Human resources - assessment of this competency will require human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
  - be competent in this unit
  - be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
  - have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A

Consistency in performance

- Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable to the work environment

Context for assessment

- This unit of competency must be assessed in the context of sport or recreation activity. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace
- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
## RTC3201A Conduct operational inspection of park facilities

### Unit Descriptor
This competency standard covers the process of inspecting park/recreational facilities to identify hazards, existing and/or potential risks, and non-conformities with Australian Standards and OHS requirements. The operational inspection of park/recreational facilities is likely to be under limited supervision from others and with checking only related to overall progress. The work is normally done within routines, methods and procedures where some discretion and judgement is required in the selection of equipment and materials, organisation of work, services, actions and the achievement of outcomes within time and budgetary constraints.

### Unit Sector
No Sector Assigned

### ELEMENT PERFORMANCE CRITERIA

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Prepare for operational inspection | 1.1 Specific **facilities and equipment** to be inspected and purpose of the inspection are determined according to operational request.  
1.2 **Tools and equipment** for testing and inspection are selected according to **enterprise work procedures**.  
1.3 Pre-operational and safety checks are carried out on tools and equipment according to manufacturers specifications and enterprise work procedures.  
1.4 Appropriate checklists and reporting formats are prepared to suit the application.  
1.5 Different types of facilities are identified from checklist descriptions.  
1.6 Specific terminology used in checklists is clarified with the supervisor. |
| 2. Undertake operational inspection | 2.1 Modes of **non-conformity** with **Australian Standards**, OHS guidelines and enterprise standards are identified and recorded.  
2.2 **Hazards** and indications and signs of hidden faults are detected and recorded.  
2.3 Checklist entries are concise and accurate.  
2.4 Inspections are undertaken according to **OHS requirements**. |
| 3. Recommend effective rectification action | 3.1 Situations requiring urgent action are reported immediately to supervisors.  
3.2 Recommendations to rectify non-conformities are noted as required.  
3.3 An inspection report is submitted to the supervisor according to enterprise work procedures. |
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Written, oral and tele-communication of ideas and information relating to inspection activities and problems encountered will be required with the work group and supervisor.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Enterprise work procedures, site plan and inspection checklists should be consulted, interpreted and applied to conduct operational inspection, with further clarification sought from the supervisor when necessary.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Own work activities will be planned prior to and adjusted during the operational inspection.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>The inspection program may involve facilitating and leading members of a team to complete the program on time and budget.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical application will be required to assess the scope and extent of replacement or repair of components of park/recreational facilities and equipment.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Site contingencies, personnel difficulties, timeline failures and assessing and controlling hazards may require problem-solving techniques.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technological understanding will be required to use testing and inspection equipment, undertake inspection activities, communicate and keep records.</td>
<td>1</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environmental implications and variables for training and assessment, refer to the Sector Booklet.

<table>
<thead>
<tr>
<th>What facilities and equipment may require operational inspection?</th>
<th>Facilities and equipment may include playgrounds, playground softfall and pathways, play equipment, parks and street furniture and structures, fences, barbeques, steps and stairs, bollards, tree and grass protection devices, bins, signs, toilets, shelter buildings and structures, and paved, turf and/or grassed recreational areas.</th>
</tr>
</thead>
<tbody>
<tr>
<td>What tools and equipment may be required?</td>
<td>Tools and equipment may include a ladder, torch and electronically and manually operated testing equipment appropriate to the facilities and equipment to be inspected.</td>
</tr>
<tr>
<td>What enterprise work procedures may apply to this standard?</td>
<td>Work procedures will be based on OHS and national standards, practices and procedures and may include supervisors oral or written instructions, inspection program, enterprise Standard Operating Procedures (SOP), specifications, routine maintenance schedules, work notes, manufacturers' service specifications and operator's manuals, waste disposal, recycling and re-use guidelines, and OHS procedures.</td>
</tr>
<tr>
<td>What modes of non-conformity may be identified?</td>
<td>Modes of non-conformity may include obvious or hidden hazards, worn or damaged components such as bearings and moving joints, structural instability and defective operation of equipment.</td>
</tr>
<tr>
<td>What Australian standards may be relevant to this competency standard?</td>
<td>Australian Standards may include those covering playgrounds, boardwalks, shelters, pathways, lookouts and fences (e.g., AS4486.1, AS4422, AS1924.1 and AS1924.2).</td>
</tr>
<tr>
<td>What hazards may be identified?</td>
<td>OHS hazards may include damaged parts, broken glass, syringes, overfilled litter and recycling bins, waterlogged areas, dysfunctional water bodies and features, loss of soft surfacing, protruding nails, bolts and splinters, sudden changes in surface levels such as holes and trip points, and worn, rusted and weathered components.</td>
</tr>
<tr>
<td>What OHS requirements may be relevant to this standard?</td>
<td>OHS requirements may include identifying hazards, assessing risks and implementing controls, cleaning, maintaining and storing tools and equipment, appropriate use, maintenance and storage of personal protective equipment including sun protection, safe operation of tools and equipment, basic first aid, personal hygiene, and reporting problems to supervisors.</td>
</tr>
</tbody>
</table>
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in conducting an operational inspection of park/recreational facilities requires evidence that a person is able to prepare for inspection activities and undertake testing and checking of park/recreational facilities to effectively identify hazards, existing and/or potential risks, and non-conformities with Australian Standards and OHS requirements. The skills and knowledge required to conduct an operational inspection must be transferable to a different work environment. For example, this could include different park/recreational facilities, inspection guidelines and environments.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- The range, use and safety parameters of park/recreational facilities and equipment, their material construction and maintenance requirements.
- The operational expectations and enterprise standards for the presentation and working order of a range of park/recreational facilities and equipment.
- Different modes of non-conformity that may be identified in reference to relevant Australian Standards and OHS requirements.
- Terminology used to describe different components of park/recreational facilities and equipment.
- Inspection procedures and techniques, and legal and enterprise reporting requirements for maintenance, repair and replacement recommendations.
- OHS legislative requirements and Codes of Practice associated with public use of park facilities.
- Identification, assessment and control of hazards.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Communicate with work team members and supervisors.
- Utilise proforma reporting and work procedure documents.
- Understand design symbols and terminology.
- Compare actual measurements of inspected components with legal, OHS and/or enterprise standards and specifications.
- Organise and coordinate own work activities with other work groups to sequentially and effectively complete operational inspection in a timely and cost effective manner.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.
Essential Assessment Information

There is critical information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
### RTC3206A

#### Erect timber structures and features

This competency standard covers the process of erecting timber structures and features as a component of landscape project works. These structures and features may include fences, pergolas, trellises, lattices, gazebos, small bridges, handrails, boardwalks, steps, decking, sheds, playhouses, screens, and site furniture. The erecting of timber structures and features is likely to be under limited supervision from others with checking only related to overall progress, and is usually done within established industry guidelines. Some discretion and judgement may be required in the selection, assembly and securing of the timber components used in the structure or feature.

#### Unit Sector

No Sector Assigned

### ELEMENT PERFORMANCE CRITERIA

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Plan and prepare work | 1.1 Plans and specifications are interpreted and clarified with the supervisor.  
1.2 The quantity and quality of materials are checked to ensure they conform to design drawings and specifications.  
1.3 **Tools and equipment** are selected and checked for serviceability according to enterprise guidelines.  
1.4 **OHS hazards** are identified, risks assessed, and controls implemented.  
1.5 **Environmental implications** of erecting timber structures are identified and reported to the supervisor. |
| 2. Prepare the site for the structure | 2.1 **Services** are identified and located from site plans.  
2.2 The position of the structure is marked out according to design drawings and specifications.  
2.3 Profiles are established to conform to the tolerances nominated within the design drawings and specifications.  
2.4 **Footings** are excavated and prepared according to the type of structure to be erected. |
| 3. Prepare and cut timber components | 3.1 Components are **prepared** for assembly to the requirements contained in the design drawings and specifications.  
3.2 The length of components and the positions of cuts and joints are marked out with a pencil according to designated specifications in design drawings.  
3.3 **Cutting tools** are selected, used and maintained according to manufacturers recommendations and **OHS specifications**.  
3.4 Components are cut, checked out and drilled accurately in preparation for **joining** and assembly.  
3.5 Appropriate personal protective equipment is worn. |
| 4. Assemble and erect structure | 4.1 Timber components are assembled into position and **fixed** into place according to design drawings and specifications.  
4.2 Remaining components are installed and fixed into position according to design drawings and specifications.  
4.3 Structure is **finished off** to ensure all components are secure and complete.  
4.4 **Coatings** are applied according to specifications, manufacturers recommendations and OHS guidelines. |
5. Check quality of work and clean up site

5.1 Quality of finished works is given a final check to ensure the standard of the finished structure or feature is in accordance with design drawings and specifications.

5.2 Debris is cleaned from structure and site according to enterprise guidelines.

5.3 Waste material is disposed of according to OHS and environmental requirements.

5.4 Unused timber is stored and stacked for future re-use according to enterprise guidelines.

5.5 Tools and equipment are cleaned and stored according to enterprise guidelines and OHS requirements.

**KEY COMPETENCIES**

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Information regarding timber selection may need to be discussed with suppliers, the client and other members of the work team.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>The information on design drawings, specifications and site plans may need to be collected, analysed and then transferred to site.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Activities on the work site may need to be planned and organised to ensure efficient use of time and resources.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Team work may be required when assembling and erecting timber structures and features.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical techniques may be applied when calculating lengths of timber and marking out cuts and joints.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems may arise if calculations of timber lengths are inaccurate.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>The use of technology may be applied when using levelling equipment to mark out the structure site.</td>
<td>2</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

What tools and equipment are likely to be used when erecting timber structures and features?
Tools and equipment may include levelling equipment, ladders, guy ropes, string lines, tape measures, marking gauges, spades, shovels, crow bars, chisels, hammers, spanners, nails, nail punches, planes, clamps, power tools such as electric drills and saws, handsaws, sanding blocks, paint brushes and putty knives.

What OHS hazards apply to this standard?
OHS hazards may include manual lifting, use of power tools, use of sharp hand tools, dust, sun exposure, working at heights, falling objects, overhead powerlines, and contact with treated timber.

What environmental implications are likely to be considered?
Consideration may be given to the impact of soil disturbance and the alteration to water flow during construction, and after the structure or feature has been erected, use and disposable of treated timbers.

What services are likely to be located on site?
Services may include power, gas, water, stormwater, sewerage or septic connections, phone and optical cables.

What types of footings are likely to be prepared for timber structures and features?
Footings may be concrete or in some case rammed earth. The depth of footings and timing of footing installation may vary according to the type of structure to be erected. Some structures (e.g., fences) need the post and footing installed at the beginning, others may be supported by bracing during assembly and when complete, the footings are filled.

What timber components are likely to be included in a timber structure or feature?
Timber components may include beams, rafters, joists, battens, slats, rails and planks.

How is the timber likely to be prepared before assembly?
Timber preparation may include planing arising from the identification of knots.

What cutting tools are likely to be used?
Cutting tools may include handsaws, electric saws and chisels.

What OHS specifications may be included for the use of power tools?
OHS specifications may include routine pre-start checks such as cleaning air filters, blades, brakes, safety bars, nuts, bolts and screws, and the operating of power tools according to manufacturers recommendations including correct handling, guards, electrical safety, the wearing of protective clothing, regular servicing, and safe storage when not in use.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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<tbody>
<tr>
<td>What methods are likely to be used for joining timber?</td>
<td>Timber joints may include corner halving, tee halving, bevelled tee halving, stopped halving, cross halving, halved scarf, through dovetail halving and stopped dovetail halving.</td>
</tr>
<tr>
<td>How can timber components be fixed into place?</td>
<td>Timber fixing methods may include galvanised plates, saddles, nails, cup head bolts, coach screws, dyna bolts, timber glues or other fasteners.</td>
</tr>
<tr>
<td>How can a structure or feature be finished off to ensure completeness and security of components?</td>
<td>Finishing off may include the cutting off of overhangs, sanding, and the plugging of holes and any other cosmetic work that may be required.</td>
</tr>
<tr>
<td>What coatings are likely to be applied to timber structures and features?</td>
<td>Coatings may include paint, varnishes and lacquers.</td>
</tr>
<tr>
<td>How is unused timber likely to be stored and stacked?</td>
<td>Storing and stacking may include the use of ground sheets, chocks, waterproof covers and strapping in accordance with safe stacking procedures.</td>
</tr>
</tbody>
</table>

**EVIDENCE GUIDE**

What evidence is required to demonstrate competence for this standard as a whole?

Competence in erecting timber structures and features requires evidence that the work can be planned and prepared for, that the structure site can be marked out according to design drawings and specifications, and that the structure or feature can then be assembled, erected and finished off according to the required standards. The skills and knowledge required to erect timber structures and features must be transferable to a different work environment. For example, this could include different timber structures, timbers, locations, environments and work conditions.

**What specific knowledge is needed to achieve the performance criteria?**

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Levelling principles and techniques.
- Timber properties and characteristics.
- Common timber joints.
- Timber fixing methods and product.
- Footings and their construction used for timber structures.
- OHS requirements associated with erecting structures and features.
- Environmental implications associated with excavation and construction activity.
### What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Interpret design drawings and specifications.
- Measure and mark lengths of timber accurately.
- Join timbers using a variety of recognised methods.
- Use some surveyors instruments.
- Use hand and power tools according to OHS requirements.
- Demonstrate safe working practices.

### Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

### Essential Assessment Information

There is **essential information about assessing this competency standard for consistent performance** and **where and how it may be assessed**, in the Assessment Guidelines for this Training Package. All users of these competency standards must have **access** to both the **Assessment Guidelines** and the relevant **Sector Booklet**.
RTC3209A Plan and construct conventional fencing

This competency standard covers the functions required to plan and construct conventional fencing. Conventional fencing refers to post and wire/wire netting under tension and can be used for animal control or as a deterrent for people and vehicles. It requires the application of skills and knowledge to identify and incorporate fencing needs and enterprise objectives into an efficient and cost-effective fence. It also requires the ability to match fencing requirements to the property's topography. It requires an awareness of workplace safety and environmental practices associated with maintenance activities. The work in this standard is likely to be carried out under routine supervision within enterprise guidelines.

Unit Sector No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Determine fencing requirements

1.1 Fencing requirements are assessed and clarified according to enterprise objectives.

1.2 Equipment, materials and labour requirements are determined, and estimated costings are maintained within budgetary constrains.

1.3 Plan is prepared giving consideration to siting fences in relation to natural features and proposed uses.

1.4 Legal requirements associated with fencing construction are identified.

2. Prepare for construction

2.1 Proposed fencing is checked and verified against property maps and work plan.

2.2 Services, structures and features, which may impact on the fencing work, are identified and incorporated into the fencing plan.

2.3 Tools and fencing equipment (including safety equipment), are arranged and safely and efficiently transported to the work site.

2.4 Labour requirements are arranged and confirmed according to enterprise requirements.

2.5 Potential and existing hazards in the workplace are risk assessed and minimised according to OHS requirements.

3. Construct conventional fence

3.1 Suitable personal protective equipment is selected, used, maintained and stored according to OHS and enterprise requirements.

3.2 Fence lines are marked out and checked against work plan and property maps.

3.3 Fence is constructed according to work plan, OHS and enterprise requirements.

3.4 Gates are attached and appropriately positioned for correct operation and function according to work plan.

3.5 All work is carried out safely according to OHS and enterprise requirements.
4. Complete fencing operations

4.1 Work site is **cleared and tidied** and all waste is disposed of in an environmentally responsible manner.

4.2 Tools and fencing equipment are transported safely from the work site and stored according to manufacturers recommendations and enterprise requirements.

4.3 Tools and equipment faults or malfunctions are reported for repair or replacement according to enterprise requirements.

4.4 Relevant information is recorded and maintained according to enterprise requirements.

**KEY COMPETENCIES**

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<td>Communicating ideas and information</td>
<td>Information with regard to fencing requirements and planning may be sourced from management and the property network.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information with regard to the type of fencing, siting details and resource requirements may be prepared and included in a plan.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Activities involving the purchasing of materials and arranging their transportation to worksite may be planned and arranged prior to work schedule.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>In the application of methods and procedures to construct fencing according to plan within timeframes and health and safety meetings.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Basic mathematical techniques may be applied in quantity surveying, costing alternatives and measuring and drafting.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems of topography, stock pressures, location of gates may be solved by revising and making changes to the fencing plan.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be used to communicate, process information and assist in construction processes.</td>
<td>1</td>
</tr>
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RANGE STATEMENT

The Range of Variables explains the range of contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

What may be identified in fencing requirements? This may include types of fencing and the purposes for which it is to be used.

What equipment and materials may be required for the construction of fences? This may include post driver, post hole diggers, fencing pliers, wire striainers, wire cutters, wire spinners, shovel, crowbar/rammer, brace and bit, drill, fencing wire might include: plain, barbed, ringlock, netting, posts, droppers, wire, staples, gates, hinges and chains.

What information may be included for consideration in a fencing plan? This may include the type of materials required and costs, type of stock/animal/people control required, soils, topography, water, layout of site/land to be fenced, machinery use and access.

What information may be included in a work plan? This may include designated work tasks, allocated tools and equipment, materials requirements, procedures for pre-start and safety checks of tools and equipment, timeframe for work completion, managers instructions and reporting requirements.

What may be involved in the efficient transport of tools and equipment? This may involve methods and procedures to minimise possible damage or loss to tools, equipment and personnel.

What enterprise requirements may be applicable to this standard? Standard Operating Procedures (SOPs), industry standards, production schedules, Material Safety Data Sheets (MSDSS), work notes and plans, product labels, manufacturers specifications, operators manuals, enterprise policies and procedures (including waste disposal, recycling and re-use guidelines), and supervisors oral or written instructions.

What hazards may be relevant to this standard? This may include exposure to hazardous noise, dust solar radiation and adverse weather conditions, PTO shafts, manual handling, trip or uneven surfaces, splinters, insect, spider and snakebites, and wire breakage when straining. It may also include electricity associated with powered tools.
| **What OHS requirements may be applicable to this standard?** | Safe systems and procedures for:  
- the use of fencing tools and equipment  
- the operation of vehicles  
- hazard and risk control  
- lifting, carrying and handling techniques  
- manual handling especially when handling posts and coils of wire and using a rammer  
- the use, maintenance and storage of personal protective equipment  
- outdoor work including protection from solar radiation  
- protection from dusts  
- the administration of first aid. |
| **What personal protective equipment may be relevant to this standard?** | This may include boots, overalls, gloves, eye protection, hearing protection, respirator or face mask, and sun protection. |
| **What may be involved in the construction of a fence?** | This may include constructing end assemblies, positioning marker wire, installing and securing intermediate posts along the marker wire, attaching wires to posts which are then joined, strained and fixed using correct knots. It may also include laying out and securing droppers to the wires. |
| **When might gates be determined as operating correctly?** | Gates are attached to a gate post, hung, swung and secured for closure. |
| **What may be involved in clearing and tidying a work site?** | This may involve replacing dirt, and the removal and safe disposal of waste. |
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in this standard requires evidence of the ability to develop conventional fencing plans and implement its construction. It requires the ability to access and interpret plans, arrange surveys and analyse results, calculate cost structures, obtain legal authorisations for development, and provide alternative options. Evidence must also be demonstrated in an awareness of legislative requirements associated with planning and construction activities. The skills and knowledge required to plan and construct conventional fencing must be transferable to another rural environment.

For example, this could include different fencing situations, materials, terrain and environments.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Issues affecting property fence planning and construction.
- Procedures for planning fencing in relation to the whole property plan.
- Range of fencing designs, construction methods and materials.
- Types of fencing construction tools and equipment.
- Fencing materials and costings.
- Common fencing hazards and safety precautions.
- OHS legislative requirements and Codes of Practice.
- Relevant Codes of Practice with regard to the protection of the environment.
- Hazard identification, assessment and control.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Draft fencing plans and specifications.
- Cost fencing plans.
- Arrange and purchase supplies.
- Demonstrate safe workplace practices.
- Minimise environmental impacts.
- Read and interpret plans.
- Consult with and report to management.
- Calculate and measure fencing requirements and calculate costings.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
**RTC3211A Implement a maintenance program for an aquatic environment**

**Unit Descriptor**
This competency standard covers the process of implementing a maintenance program for an aquatic environment. This maintenance includes the monitoring of aquatic plant and/or animals, water quality, and the movement of water into and out of the environment. The maintenance and monitoring of an aquatic environment is usually undertaken according to enterprise guidelines and within established routines, methods and procedures. Some discretion and judgement may be required depending on the type and size of the aquatic environment.

**Unit Sector**
No Sector Assigned

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
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</table>
| 1. Prepare for maintenance activities | 1.1 Enterprise guidelines and legislative requirements for the maintenance of the aquatic environment are identified, interpreted and applied.  
1.2 Tools, equipment and machinery are selected and prepared for use according to enterprise guidelines and manufacturers specifications.  
1.3 OHS hazards are identified, risks assessed, and suitable controls implemented.  
1.4 Environmental implications associated with maintenance activities are identified and reported to supervisor. |
| 2. Maintain aquatic organisms | 2.1 Identification of indigenous, exotic and pest aquatic animals and/or plants is undertaken for the specific aquatic environment.  
2.2 Aquatic plant and/or animal monitoring is undertaken and relevant data is recorded, maintained and applied to aquatic plant maintenance activities.  
2.3 Aquatic animal and/or plant issues are reported to supervisor, with recommendations for action.  
2.4 Control methods are implemented for excess aquatic animals and/or plants, and identified pest animals and/or plants.  
2.5 Waste plant material is processed according to enterprise guidelines. |
| 3. Maintain water quality | 3.1 Where appropriate, water quality monitoring is undertaken for the aquatic environment and the input water resource according to standards for the end use of the aquatic environment.  
3.2 Monitoring data is recorded, maintained and applied to water quality maintenance activities.  
3.3 Debris is removed and processed using appropriate equipment according to enterprise guidelines.  
3.4 Water quality issues are reported to supervisor, with suggestions for remedial action.  
3.5 Where required, water is discharged, environment is cleaned, and water is recharged from the designated storage area or other input water resource. |
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
<td>Communicating ideas and information</td>
<td>Written, oral and telecommunication of ideas and information relating to maintenance activities and problems encountered will be required with the supervisor and work group.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information about the features and components of the aquatic environment, enterprise guidelines, site plans and maintenance program should be consulted, interpreted and applied to conduct and/or coordinate aquatic maintenance activities with further clarification sought from the supervisor where necessary.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Work activities for the work group and self will be planned prior to and adjusted during the maintenance program.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>The aquatic maintenance program will involve facilitating and leading members of a team to complete maintenance activities on time and budget.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical application will be required to calculate areas, volumes, application rates and the logistical requirements of the maintenance program.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Site contingencies, personnel difficulties and timeline failures of a maintenance nature may require problem-solving techniques.</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technological understanding will be required to access and apply maintenance program requirements specifications, to undertake maintenance in an aquatic environment, communicate and keep records</td>
<td>3</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

| **What enterprise guidelines may apply to the specific aquatic environment?** | Work guidelines will be based on sound aquaculture, horticultural and environmental principles and practices, and may include supervisors oral or written instructions, maintenance programs, site plans, enterprise Standard Operating Procedures (SOPs), specifications, routine machinery maintenance schedules, work notes, product labels and Material Safety Data Sheets (MSDSs), manufacturers service specifications and operators manuals, waste disposal, recycling and re-use guidelines, and OHS procedures. |
| **What aquatic environment may require maintenance?** | This may include contained water bodies, such as ponds and lakes and moving water bodies such as streams, creeks and rivers which may be artificially lined or have a natural bed. Aquatic systems may be still or reticulated, with water movement between a series of pools. Aquatic systems may support only plant life, but may also include fauna such as fish, amphibians and naturally occurring micro and macro invertebrates. |
| **What tools, equipment and machinery may be selected?** | Tools may include shears, secateurs, rakes, shovels, spades, buckets, wheelbarrows, brushes and hoses. Equipment and machinery may include aqua/marine harvester, brush-cutter, boats, pumps, filters and hoses. |
| **What OHS hazards may be associated with the maintenance of an aquatic environment?** | Hazards may include disturbance or interruption of services, drowning, the use of powered equipment in an aquatic environment, solar radiation, dust, noise, air, soil and water borne organisms, chemicals and hazardous substances, manual handling, moving machinery and machinery parts, uneven surfaces and flying objects. |
| **What suitable controls are likely to be implemented?** | Controls may include pre operational and safety checks of tools, equipment and machinery, erection of safety signs and barriers, maintaining a clean and safe work area, training in boating skills and the appropriate use of boating equipment, the observance of correct safety procedures in working from boats or adjacent to large bodies of water, appropriate use of personal protective equipment including sun protection and the wearing of life jackets, basic first aid training, safe handling, use and storage of chemicals and hazardous substances, and correct manual handling techniques. |
| What environmental implications may be associated with the maintenance of an aquatic environment? | • Beneficial environmental impacts may include control of the growth and spread of environmental weeds, and improving water and plant quality.  
• Detrimental environmental impacts may include the use of environmentally harmful chemicals in or near a water body, soil erosion from inappropriate discharge and recharge procedures, or discharge of water for disposal. |
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<tbody>
<tr>
<td>What identification procedures may be relevant for maintaining an aquatic environment?</td>
<td>These may include identifying plants to genus, species and cultivar where relevant, collecting samples and developing an herbarium.</td>
</tr>
<tr>
<td>What aquatic animals and/or plants monitoring procedures may be undertaken?</td>
<td>Monitoring may include tallying of aquatic animals and/or plants organisms at established observation points against existing checklists, noting new species and incorporating them into the monitoring program, and collating monitoring data over time for analysis of the population dynamics of desired and pest aquatic plant and animal species.</td>
</tr>
<tr>
<td>What aquatic animals and/or plants issues may be identified and reported to the supervisor?</td>
<td>These may include issues for control of invasive and pest plants, population manipulation and individual plant pruning and/or animal removal, visitor and service access, and aesthetic and ecological balance.</td>
</tr>
<tr>
<td>What plant control methods may be applied in an aquatic environment?</td>
<td>Control methods for aquatic plants may include the application of herbicide to semi submerged or dry plants via spray or weed wand. Aquatic plants may also be controlled by pruning, slashing or manual removal. Animals may be controlled by removal from site or humane destruction. Access for control application may be from the bank of the water body, a boat or by wading.</td>
</tr>
<tr>
<td>What waste plant material may require processing for disposal?</td>
<td>This may include noxious weed material, and excess leafy and woody material removed from the aquatic environment.</td>
</tr>
<tr>
<td>How may waste and debris be processed?</td>
<td>Workplace waste processing procedures may include composting, toxic material separation and appropriate disposal, and separation and storage of litter and other non-toxic debris for rubbish collection.</td>
</tr>
<tr>
<td>What water quality monitoring procedures may be undertaken?</td>
<td>Monitoring of water quality may include field testing or the collection and analysis of water samples for micro and macro invertebrates, turbidity, salinity, acidity, pH, total phosphates, nitrates, dissolved oxygen, Biological Oxygen Demand (BOD), Iron, Chloride, Calcium Carbonate, temperature, total solids and micro-flora such as algae, and recording of water levels, and quantity and type of debris in the aquatic environment.</td>
</tr>
<tr>
<td>What water quality issues may be identified for the aquatic environment?</td>
<td>These may include non-compliance with standards and legal requirements, nutrient imbalances, toxicity, salinity, acidity, low or high water levels and algal blooms.</td>
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</tr>
<tr>
<td>What water resource may provide water to the aquatic environment?</td>
<td>Water resources may include mains water, sub-surface water, rain water, landscaped rain catchment, enterprise run-off, rain water tank, and a lake or natural waterway.</td>
</tr>
<tr>
<td>What end use may influence the maintenance requirements of the aquatic environment?</td>
<td>Use may include recreational activities and aesthetic display. Recreational use may include swimming and boating in large systems. Display may support aesthetic plants, fish and amphibians.</td>
</tr>
<tr>
<td>What debris may require removal from the aquatic environment?</td>
<td>This may include light litter such as fast food wrappings and containers, syringes, condoms, large, dumped refuse such as car bodies and drums, large plant waste, animal faeces and animal remains.</td>
</tr>
<tr>
<td>What work may be required when water is discharged?</td>
<td>Pre-operational and safety checks should be conducted on the water discharge system, animals and/or plants that require removal during cleaning are removed to a suitable environment for the duration of the cleaning process, and water is discharged to a designated storage or disposal location.</td>
</tr>
<tr>
<td>What cleaning may be required once water is discharged?</td>
<td>Cleaning may involve manual removal of algae and build-up material from the water body floor according to enterprise and OHS guidelines and sound environmental management.</td>
</tr>
</tbody>
</table>
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in implementing a maintenance program for an aquatic environment requires evidence that the person is able to recognise and assess desired and pest plant populations, apply controls where necessary to maintain balance and remove weeds, and maintain water quality to the required standard for the end use of the aquatic environment. The skills and knowledge required to implement a maintenance program for an aquatic environment must be transferable to a different work environment. For example, this could include different aquatic systems, maintenance techniques and environments.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Recognition, physiology and biological characteristics of animals and/or plants specific to the aquatic environment.
- Aquatic systems ecology.
- Relevant legislation regarding water pollution and management.
- Wildlife habitats associated with the aquatic environment.
- Food chain and nutrient cycling in aquatic systems.
- OHS legislative requirements and Codes of Practice.
- Regulations and/or Codes of Practice pertaining to Hazardous Substances.
- Safe systems and procedures for handling, transporting and storing chemicals and hazardous substances taking into account toxicity levels and environmental impacts.
- Regulations, Codes of Practice, enterprise systems and procedures for the safe operation and maintenance of machinery and equipment in aquatic environments, and in observing correct safety procedures in working from boats or adjacent to large bodies of water.
- Regulations and industry standards for water quality requirements in association with specified use.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Communicate verbally and in writing with work team members, supervisors, contractors and consultants.
- Interpret site plans and maintenance program requirements, and utilise proforma reporting, recording, analysis and work procedure documents.
- Measure materials, and aquatic site dimensions.
- Schedule and implement monitoring activities correctly, and record, interpret and apply monitoring data.
- Coordinate and supervise work group and own activities to sequentially and effectively complete maintenance activities in a timely, and cost effective manner.
Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
**RTC3213A**  
**Implement property improvement, construction and repair**

**Unit Descriptor**  
This competency standard covers the functions required to carry out maintenance and construction of improvements to properties. It requires the application of basic skills and knowledge to assess condition of structures and plan for new improvements. It requires an awareness of workplace safety and environmental practices associated with maintenance activities. The work is likely to be carried out under routine supervision within enterprise guidelines.

**Unit Sector**  
No Sector Assigned

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Assess property condition | 1.1 **Property structures** are assessed for soundness and recorded according to enterpise requirements.  
1.2 Property improvements and maintenance requirements are identified and determined according to enterprise objectives.  
1.3 Budgetary parameters are identified and maintained according to enterprise requirements. |
| 2. Prepare tools and equipment | 2.1 **Tools, equipment and materials** required to carry out property improvements are identified and arranged on site.  
2.2 Tools and equipment are checked for serviceability according to manufacturers specifications.  
2.3 Faulty or unsafe tools and equipment are identified and segregated for repair or replacement according to enterprise requirements.  
2.4 Existing and potential hazards to health and safety are identified, assessed and reported according to OHS and enterprise requirements. |
| 3. Carry out property improvements | 3.1 Suitable **personal protective equipment** is selected, used, maintained and stored according to OHS and enterprise requirements.  
3.2 Property structures are **constructed, repaired or dismantled** as required according to manufacturers specifications and/or work plan and regulations (e.g., demolition code).  
3.3 **Basic concrete, masonry or metal repairs** are carried out according to manufacturers specifications and work plan.  
3.4 **Maintenance to roads and tracks** are determined and carried out according to work plan and enterprise requirements. |
| 4. Complete maintenance and improvement activities | 4.1 Property structures and surrounds are monitored, maintained and improved as required.  
4.2 Worksite, tools and equipment are cleaned, returned to operating order, and stored according to OHS and enterprise requirements.  
4.3 Unwanted materials and waste from maintenance activities is collected, treated and disposed of or recycled according to enterprise environmental and OHS requirements.  
4.4 **Relevant information** is documented and reported according to industry and enterprise requirements. |
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information with regard to property improvements and maintenance requirements may be discussed with the management.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information with regard to repair requirements and may be detailed and organised by reports for analysis.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Activities involving programmed maintenance may be planned and coordinated around work schedules or sequenced as required.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>In the application of methods and procedures to effectively complete scheduled maintenance or repairs within timeframes.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Basic mathematical techniques may be applied in the calculation and measurement of materials.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Contingency plans may be prepared for adverse weather conditions to minimise disruption to work schedules and how to eliminate or control a hazard.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be used to communicate, repair and maintain property structures.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables explains the range of contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

What may be included in property structures?

Property structures may include buildings, yards, livestock handling structures, fences, water supply systems, roads, tracks, soil conservation works, irrigation and drainage channels, silage pits, grain and fodder storage, trellises, shelters and shadecloth drying racks.
### What enterprise requirements may apply to this standard?

This may include local building codes, Australian Quality Standards, Standard Operating Procedures (SOPs), industry standards, work notes, product labels, manufacturers specifications, Material Safety Date Sheets (MSDSs), operator and emergency procedures manuals, technical information, enterprise policies and procedures (waste disposal, recycling and re-use guidelines), supervisors oral or written instructions and reporting requirements.

### What tools, equipment and materials may be used?

This may include hand or small power tools, ladders, spanners, hammers, crowbars, post hole diggers, shovels, pliers, cutters, ponger bar, rattle gun, wire strainers, star picket drivers, string lines, socket sets, power saws, spirit levels, tape measures, hand drills, hand saws, chain saws. Structural finishes may require paint, stains. Cladding maintenance may require corrugated iron, weatherboards, glass, shade cloth, plastic, cement sheeting. Basic welding equipment.

### What hazards may be associated with maintenance activities?

Workplace hazards may include exposure to loud noise and fumes, solar radiation, working at heights, in confined spaces, moving machinery and equipment, manual handling, dust and hazardous substances. It may also include oil and grease spills and electricity while using powered tools.

### What OHS requirements may be relevant to this standard?

Safe systems and procedures for:

- operation of tools and equipment.
- maintenance and repair methods.
- operation of vehicles.
- working at heights, including roof framework and cladding.
- operation and maintenance of machinery and equipment including hydraulics and guarding of exposed moving parts.
- protection against electrical hazards including overhead powerlines and electrical fittings.
- identifying and reporting hazards.
- lifting, carrying and manual handling.
- handling and storage of hazardous substances.
- appropriate use, maintenance and storage of personal protective equipment.
- outdoor work including protection from solar radiation.
- protection from hazardous noise, organic and other dusts.
- confined space entry.

### What personal protective equipment may be relevant to this standard?

This may include boots, hat/hard hat, overalls, gloves, protective eyewear, hearing protection, safety harness, respirator or face mask, and sun protection.
| What may be involved in the construction, repair or dismantling of property structures? | Structural maintenance is coordinated with licensed trades to meet State and local government requirements. Repairs may include (but is not restricted to):
- Window: replacement of glass panes or louvres, replacement of insect screens or flywire, repair or replacement of window sashes.
- Internal or external wall: refastening of cladding, use of brickwork and bricklaying, use of sealants, replacement of sheets, correct use of levels.
- Roof surface: corrugated iron, tiles, colorbond, guttering and spouting, downpipes. |
| What information may be included in a work plan? | This may include details and procedures of designated work tasks, allocated tools and equipment, materials requirements, procedures for pre-start and safety checks of tools and equipment, timeframe for work completion, risk assessments, managers instructions and reporting requirements. |
| What may be involved in basic concrete, masonry or metal repairs? | Concrete and masonry repairs should include correct use of levels, correct design, measurement and installation of formwork, preparation of damaged masonry, correct mix of cement for a given concreting situation, correct laying and tying of reinforcing, finish surface to match existing wall/structure, or as suitable non-slip surface for floor or path areas. Metal work should include basic fabrication and repair. |
| What requirements may be involved in the maintenance to roads and tracks? | - Required repairs for roads and tracks should include adequate camber for drainage, thorough compacting of materials, safe operations of vehicles and implements, avoidance of damage to property and equipment.
- Effectiveness of repairs to roads and tracks may be checked according to cleared culverts or sump holes to allow effective drainage, suitable surface for vehicles or livestock, and minimum ongoing maintenance during a range of weather conditions. |
| What relevant information may be documented? | This may include the use and performance of tools and equipment, operational faults or malfunctions, completed maintenance and repair tasks and outcomes, and hazard and incident reports. |
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in implementing property improvements, construction and repairs requires evidence of the ability to maintain property improvements and surrounding areas. It also requires the ability to use a range of hand and power tools, prepare basic plans, carry out fabrication in wood and steel, and complete a range of earthworks to specification. The skills and knowledge to implement property improvements, construction and repairs must be transferable to a different work environment. For example, this could include different properties, improvements, structures, maintenance requirements and work environments.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Machinery and equipment required to carry out property improvements, construction and repairs.
- Types of building materials.
- Concreting and welding procedures and techniques.
- Wood and steel fabrication procedures.
- Drainage requirements around structures, tracks and roads.
- Legislative requirements with regard to construction and structural improvements.
- Types of building cladding and finishes, purpose and use.
- OHS issues, legislative requirements and Codes of Practice.
- Relevant Codes of Practice with regard to protection of the environment.
- OHS standards and how to assess and control hazards.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Operate a broad range of tools and equipment.
- Apply hand/eye coordination.
- Construct assemblies.
- Assess the nature and priority of required repairs and maintenance.
- Complete a range of earthworks to specification.
- Weld using oxy and arc equipment.
- Lay and tie reinforcing to specifications.
- Demonstrate safe workplace practices.
- Minimise impacts to the environment.
- Observe and report on the condition of structures and equipment.
- Interpret and apply task instructions.
- Communicate with work team and supervisor.
- Read and interpret maps, plans, site drawings and simple technical drawings.
- Record and report on repairs.
- Estimate and calculate volumes, usage and measurements.
<table>
<thead>
<tr>
<th>Are there other competency standards that could be assessed with this one?</th>
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<tbody>
<tr>
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<td>There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.</td>
</tr>
</tbody>
</table>
**RTC3218A Undertake a site assessment**

**Unit Descriptor**
This competency standard covers the process of undertaking a site assessment as part of preliminary tasks leading to the development of a landscape or project design. It requires the ability to identify the purpose for site assessment, collect and collate base information, prepare for the site visit, undertake a site inspection and document information.

Undertaking a site assessment requires knowledge of map reading, soil pH and texture, plant recognition, basic measuring and survey equipment and environmental threats and problems to site. Undertaking a site assessment is likely to occur under limited supervision from others with checking only related to overall progress.

**Unit Sector**
Resource management

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Identify purpose for site assessment | 1.1 Client brief is prepared and agreed  
                                           1.2 Project objectives are outlined |
| 2. Collect and collate base information | 2.1 Existing resources are identified and acquired  
                                            2.2 Site maps and plans are sourced  
                                            2.3 Base plan is prepared of the site |
| 3. Prepare for a site visit | 3.1 **Occupational Health and Safety hazards** associated with undertaking a site visit, are assessed for potential risks and controls implemented accordingly  
                              3.2 Location, ownership and site boundaries are verified  
                              3.3 **Covenants** which could affect the landscape design are identified and recorded  
                              3.4 Climate and weather conditions are ascertained from historical data  
                              3.5 Where required, formal approval is sought to visit site |
| 4. Undertake site inspection | 4.1 **Site orientation** is undertaken  
                               4.2 Existing on-site and adjacent site features that may impact upon the project objectives are identified and recorded  
                               4.3 Site grades are visually identified and recorded  
                               4.4 Soil types are identified from soil identification reference chart guidelines and soil maps and recorded on site inventory report  
                               4.5 Soil samples for testing by others are gathered and prepared according to test kit instructions |
| 5. Document information | 5.1 Site survey information is **documented** in accordance with enterprise procedures  
                          5.2 Documents are completed and forwarded to supervisor/manager according to enterprise procedures |
<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information may need to be communicated to the client via a site inventory</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>report and other site plans</td>
<td></td>
</tr>
<tr>
<td>Collecting analysing and organisating</td>
<td>Information on existing site features may need to be collected, analysed and organised</td>
<td>2</td>
</tr>
<tr>
<td>information</td>
<td>from visual inspections and/or inspections of existing plans and maps</td>
<td></td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>A logical sequence of events may need to be implemented in the form of a check list</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>when undertaking a site assessment and all details of that assessment need to be recorded</td>
<td></td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Team work may be required when visiting a site and recording information</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical ideas and techniques such as the reading of measurements and site levels</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>may be required</td>
<td></td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems may arise when assessing site boundaries and caveats</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be applied when using levelling equipment and when using computers to</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>generate plans and record information</td>
<td></td>
</tr>
</tbody>
</table>

**RANGE STATEMENT**

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

**Existing features**

features may include

- topography
- vegetation
- hydrology
- services above and below ground
- amenities
- buildings and structures
- access points
- site modifications
- fauna
- location of boundaries
- aspect, streams, paths, banks and gullies.
Covenants may include:
- easements
- right of ways
- altered boundaries
- council regulations or restrictions

Site orientation may include:
- compass bearings and magnetic north
- points of access
- utility service locations
- physical constraints of site
- safety threats and hazards
- environmental problems

Environmental impact statement may include:
- positive and/or negative outcomes re proposed works and site suitability
- if drainage and irrigation were proposed, then this may reduce excess water nutrient and chemical flow into natural waterways but if the proposed design envisaged a lot of excavation, then this may impact on soil condition and stability

Occupational Health and Safety hazards may include:
- solar radiation
- uneven surfaces
- tapes
- strings and levelling equipment that may be tripped over
- existing on-site obstacles

Datum may include:
- a datum is a level surface above or below which all heights are measured
- a datum is assigned a value, i.e., 10000, 1000, 100, etc
- the datum is usually selected by the surveyor for establishment of a starting point on a permanently fixed point, however an assumed datum can be set at 0.00 if a survey is not used
- on site a local datum point could simply be a step or a nail in a fence, which all levels are referred to

Levelling equipment may include:
- spirit levels
- line bubbles
- water levels
- boning rods
- dumpy levels
- tilting levels
- plumb bobs
- staves and tripods
Soil testing may include

- tests for pH
- salinity
- texture and soil type

Samples for testing may include

- plugs
- core samples

Soil kit test kits may include

- a dry test
- Commonwealth Scientific Industrial Research Organisation (CSIRO) kits
- EC Meters and pH kits

Documenting information through

- plans
- maps
- reports
- schedules and field notes.

The sport and recreation industry covers

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself
EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

**Critical aspects of evidence to be considered**

- Assessment must confirm sufficient knowledge in undertaking a site assessment
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's work environment
- In particular, assessment must confirm the ability to
  - use basic surveying techniques
  - produce information on site features, soil type and composition
  - collected, analysed and accurately record site levels according to recognised land surveying techniques.
  - transfer the skills and knowledge required to undertake a site assessment to a different work environment, eg, this could include different sites, environments and reasons for assessing the site

**Interdependent assessment of units**

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Nil

**Required knowledge and skills**

- Required knowledge
  - Plant recognition
  - Map reading
  - Soil pH, texture and type
  - Basic measuring and survey equipment
  - Current land use and environmental threats and problems to site
  - Occupational Health and Safety hazards associated with undertaking a site assessment
  - Protocols of accessing and visiting the site
- Required skills
  - Identify purpose for site assessment
  - Collect and collate base information
  - Prepare for site visit
  - Undertake site inspection
  - Document information
Resource implications

- Physical resources - assessment of this competency requires access to
  - levelling equipment
  - soil test kit
  - appropriate documentation and resources normally used in the workplace
- Human resources - assessment of this competency will require human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
  - be competent in this unit
  - be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
  - have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A

Consistency in performance

- Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable in the work environment

Context for assessment

- This unit of competency must be assessed in the context of a sport or recreation activity. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace
- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
RTC3310A Operate specialised machinery and equipment

Unit Descriptor
This competency standard covers the functions involved in operating specialised machinery and equipment. It requires particular skills and knowledge to operate specialised agricultural, horticultural or conservation and land management machinery. An ability to perform pre-operational checks on machinery, assess work requirements, determine work plans, monitor performance and maintain records is also required. In addition, it requires knowledge of licensing requirements, workplace safety, and positive environmental practices associated with the operation of machinery. Judgement and discretion combined with the ability to work under minimal supervision is necessary.

Unit Sector
Business Management Services

ELEMENT PERFORMANCE CRITERIA

1. Select and prepare specialised machinery and equipment for use
   1.1 Specialised machinery and equipment is selected and prepared to job requirements and confirmed against work plan.
   1.2 Routine pre-operational checks of specialised machinery and equipment are completed to manufacturers specifications and enterprise requirements.
   1.3 OHS hazards in the workplace are recognised, risk assessed and minimised according to enterprise requirements.

2. Operate specialised machinery and equipment
   2.1 Machinery and equipment is operated in a safe and controlled manner and monitored for performance and efficiency.
   2.2 Risks to self, others and the environment are anticipated and minimisation strategies implemented accordingly.
   2.3 Suitable personal protective clothing and equipment is selected, used, maintained and stored according to OHS requirements.
   2.4 Environmental implications associated with machinery operation are identified, assessed and reported to the supervisor.

3. Complete and report on specialised machinery and equipment operation
   3.1 Shut-down procedures for specialised machinery and equipment are completed to manufacturers specifications and enterprise requirements.
   3.2 Specialised machinery and equipment operational records are completed and maintained according to enterprise requirements.
   3.3 Malfunctions, faults, irregular performance and damage to specialised machinery and equipment are detailed and reported according to enterprise requirements.
   3.4 Specialised machinery and equipment is cleaned, secured and stored according to OHS and enterprise requirements.
**KEY COMPETENCIES**

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
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<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Information and ideas with regard to specialised machinery and equipment, their components and application to complete work tasks may be discussed with colleagues and the supervisor</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information with regard to performance, faults and maintenance may be observed and monitored for analysis and organised by records and reports.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Activities involving maintenance and repairs to specialised machinery and equipment may be planned and coordinated around work schedules or sequenced as required.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Team work may be applied in communication, methods and procedures to complete maintenance and repairs to complete work tasks.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematics may be applied in the calculation and measurement of load weights, distance, consumption, and oil and fuel requirements.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Specialised machinery and equipment breakdown, faults or malfunctions will need to be arranged for repair or replacement to meet work plan requirements.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>To access, communicate, measure and record information with regard to maintenance, usage and performance of specialised machinery and equipment.</td>
<td>1</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the range of contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment may depend on the work situations available.

What range of specialised machinery and equipment may be covered in this standard?

Skidsteer loaders, self-propelled harvesters and pickers, front end loaders, irrigation equipment, scissor lifts, excavators, forklifts, land levellers, feed mixers, milking machinery, specialised turf equipment, specialised nursery equipment, livestock feeding systems, watering systems, filtering and pumping equipment, poultry performance monitoring equipment, cultivation equipment, fertilising application and grain handling equipment.

This unit does not include machinery and equipment covered under RTC2306A - Operate vehicles, RTC2307A - Operate machinery and equipment and RTC2309A - Operate tractors.

What may be included in a work plan?

Pre-operational checks and maintenance procedures, designated job tasks, equipment, resources and materials for use, supervisors instructions, timeframe for work completion and reporting requirements.

What may be involved in routine pre-operational checks of machinery and equipment?

• Pre-start and safety checks including the service and maintenance of cooling system.
• Checking fuel, oils and lubricants, electrolyte levels, wheels, tyre pressure, fan belts, leads, lines, connections, air filters, brakes, clutch, gearbox, steering, lighting, and transmission.
• Inspection of safety guards, PTO stubs and shafts, and hitch and towing points.
• Checking and confirming equipment calibration settings and operating methods for turbo-charged engines.
• Observing and monitoring noise levels for correct operation.
• Preparation of independently powered tools may include cleaning, priming, tightening, basic repairs and adjustments.
• Identify and segregate unsafe or faulty equipment for repair or replacement.

What enterprise requirements may apply to this standard?

Standard Operating Procedures (SOPs), industry standards, production schedules, Material Safety Data Sheets (MSDSs), work notes, product labels, manufacturers specifications, operators manuals, enterprise policies and procedures (including waste disposal, recycling and re-use guidelines), OHS procedures, supervisors oral or written instructions, work and routine maintenance plans.
### What OHS requirements may be relevant to this standard?

- Systems and procedures for the safe operation and maintenance of specialised machinery and equipment.
- Hazard and risk identification.
- Emergency operating and defensive driving procedures ensuring working loads are secure and within specifications.
- Appropriate use, maintenance and storage of personal protective equipment.
- Outdoor work include protection from solar radiation, hazardous noise, mechanical vibration and organic and other dusts.
- Protection of people in the workplace.
- Passengers are carried only when there is a seat approved by the manufacturer.

### What hazards may be encountered in the workplace?

- Exposure to loud noise and fumes, solar radiation, heat stress, fatigue, crushed by a roll over, dust, ergonomic hazards associated with posture and vibration, hazardous substances (fuel, oils, fertiliser), oil and grease spills, the presence of bystanders, livestock and wildlife, difficult terrain and varying gradients, potholes, ditches, gullies, embankments, obstacles (rocks, logs, fences, debris, buildings), extreme weather conditions, electricity, overhead hazards including powerlines, mechanical malfunctions and exposed moving parts, and other machinery including hydraulics.

### How might safe and controlled operation of machinery and equipment be demonstrated?

- This may include:
  - Appropriate selection and use of machinery and equipment.
  - Using operational techniques for the specific terrain (on and off-road environments) and weather conditions.
  - Maintaining working loads within specifications including ensuring hitch-points are operated at the correct height.

### What personal protective equipment may be relevant to this standard?

- Boots, hat/hard hat, overalls, gloves, protective eyewear, hearing protection, high visibility clothing, respirator or face mask, and sun protection (sun hat, sunscreen).

### What environmental implications may be associated with the operation of machinery and equipment?

- Negative environmental impacts may result from excessive noise and exhaust emissions, the incorrect use and disposal of maintenance debris (oil containers, chemical residues), and hazardous substances (fuel, fertiliser). Impacts may also include run-off flows of water and cleaning agents from servicing, maintenance and cleaning activities, soil disturbance and dust problems from high activity traffic (including irrigation equipment).

### What procedures may be included in the shut-down of machinery and equipment?

- Safe dismount procedures (including turning engine off), maintaining a clear thoroughfare, parking away from hazards, securing, refuelling, cleaning, engaging handbrake and removing vehicle keys.
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in the operation of specialised machinery and equipment requires evidence of the ability to effectively utilise their respective various components, controls and features to perform specific tasks. It involves selecting the appropriate machinery and equipment for the job, determine operating methods, provide solutions for faults or breakdowns, demonstrate emergency operating procedures, evaluate performance and maintain records. Evidence must also be demonstrated in safe workplace and environmentally responsible practices. The skills and knowledge required to operate specialised machinery and equipment must be transferable to a different work environment. For example, this could include different machinery, equipment, workplaces and environments.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Components, controls and features of specialised machinery and equipment and their functions.
- Risks associated with the operation of machinery and equipment in different weather and difficult terrain conditions.
- Relevant State/Territory legislation, regulations and Codes of Practice with regard to workplace OHS, and the use and control of hazardous substances, chemical and biological agents.
- Relevant State/Territory legislation, regulations and Codes of Practice with regard to licensing, roads and traffic requirements, and the use and control of specialised machinery and equipment.
- Environmental impacts and minimisation measures associated with the operation of specialised machinery and equipment.
- Personal protective equipment and when and how it should be used.
- Enterprise policies with regard to specialised machinery and equipment use, recording and reporting routines.
What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Operate specialised machinery and equipment in normal and adverse conditions to industry standards.
- Demonstrate emergency operating procedures in normal and adverse conditions.
- Attach and detach a range of three point linkage implements, front-mounted and PTO operated equipment.
- Demonstrate safe and environmentally responsible workplace practices.
- Obtain relevant licences and permits.
- Interpret manufacturers specifications, work and maintenance plans, and MSDS.
- Communicate faults, malfunctions and workplace hazards, report and maintain operational records.
- Measure and calculate volumes, load weights, consumption and servicing requirements.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
## RTC3311A Perform specialised machinery maintenance

### Unit Descriptor

This competency standard covers the process of maintaining specialised machinery and equipment. Specialised machinery and equipment refers to machinery and equipment used principally in agriculture, horticulture, and conservation and land management work where there is high wear and tear on components. It requires the ability to carry out engine and equipment checks, undertake transmission checks, maintain high wear components and attachments, and record maintenance work. Performing specialised machinery maintenance requires knowledge of general machine function principles and maintenance, and operational replacement wear component requirements and procedures.

### Unit Sector

Horticulture

### ELEMENT PERFORMANCE CRITERIA

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Carry out engine/equipment checks</td>
<td>1.1 Timed and regular <em>engine equipment</em> checks are carried out on <em>specialised machinery and equipment</em> as specified in operator's manual</td>
</tr>
<tr>
<td></td>
<td>1.2 All relevant grease or lubricant points are lubricated according to manufacturers' specifications</td>
</tr>
<tr>
<td></td>
<td>1.3 Oils and filters are changed at intervals prescribed in operator's manual</td>
</tr>
<tr>
<td></td>
<td>1.4 Hydraulic hoses and systems checked for deterioration and defects actioned in line with supervisor's instructions</td>
</tr>
<tr>
<td></td>
<td>1.5 <em>Occupational Health and Safety hazards</em> in the workplace are identified, risk assessed and reported according to enterprise requirements</td>
</tr>
<tr>
<td>2. Carry out transmission checks</td>
<td>2.1 Drive and steering clutches are checked for operation and adjustment in line with operator manual</td>
</tr>
<tr>
<td></td>
<td>2.2 Transmission oil levels are checked in line with operator manual</td>
</tr>
<tr>
<td></td>
<td>2.3 Tracks/wheels and undercarriage are checked for oil leaks and wear</td>
</tr>
<tr>
<td></td>
<td>2.4 Faulty seals or leaks are identified and corrective actions taken according to operator's instructions</td>
</tr>
<tr>
<td></td>
<td>2.5 Machine is regularly cleaned as an integral part of maintenance checks</td>
</tr>
<tr>
<td>3. Maintain components and attachments</td>
<td>3.1 Suitable <em>personal protective equipment</em> is selected, used, maintained and stored according to <em>Occupational Health and Safety requirements</em></td>
</tr>
<tr>
<td></td>
<td>3.2 <em>Machine operational replacement wear components</em> are checked for wear and condition</td>
</tr>
<tr>
<td></td>
<td>3.3 Worn or unserviceable replacement components are replaced as part of daily routines</td>
</tr>
<tr>
<td></td>
<td>3.4 Component inspection and replacement activities are completed safely following enterprise and industry guidelines</td>
</tr>
<tr>
<td></td>
<td>3.5 <em>Moving operational components</em> are checked for wear and condition and adjusted to the tolerances specified in the operator's manual where applicable</td>
</tr>
<tr>
<td></td>
<td>3.6 Work areas are cleaned, returned to operating condition and maintained according to enterprise and Occupational Health and Safety requirements</td>
</tr>
</tbody>
</table>
4. Record maintenance

4.1 Identified faults and defects are recorded in machine record
4.2 Maintenance procedures including duplicates usage are recorded in workshop record
4.3 Service or repair requirements are reported and actioned according to prescribed procedures

**KEY COMPETENCIES**

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>By discussing verbally specialised machinery and equipment maintenance with supervisors</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Maintaining specialised machinery and equipment will require basic maintenance information to be gathered and organised accordingly</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Maintaining specialised machinery and equipment requires limited planning and organising</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Maintaining specialised machinery and equipment may require participation with others in a maintenance team</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Associated with machinery and equipment servicing and maintenance can be applied</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>While maintaining specialised machinery and equipment, technical problems may arise requiring simple solution</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>May be required to maintain specialised machinery and equipment</td>
<td>1</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

<table>
<thead>
<tr>
<th>Specialised machinery and equipment</th>
<th>may include</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>• heavy earthmoving equipment</td>
</tr>
<tr>
<td></td>
<td>• skid steer loaders</td>
</tr>
<tr>
<td></td>
<td>• self-propelled harvesters and pickers</td>
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<tr>
<td></td>
<td>• front end loaders</td>
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<tr>
<td></td>
<td>• irrigation equipments</td>
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<tr>
<td></td>
<td>• scissor lifts, forklifts, land levellers, feed mixers</td>
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<tr>
<td></td>
<td>• milking machinery and equipment</td>
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<tr>
<td></td>
<td>• specialised turf equipment</td>
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<tr>
<td></td>
<td>• specialised nursery equipment</td>
</tr>
<tr>
<td></td>
<td>• livestock feeding systems</td>
</tr>
<tr>
<td></td>
<td>• watering systems</td>
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<tr>
<td></td>
<td>• filtering and pumping equipment</td>
</tr>
<tr>
<td></td>
<td>• poultry performance monitoring equipment</td>
</tr>
<tr>
<td></td>
<td>• cultivation equipment</td>
</tr>
<tr>
<td></td>
<td>• fertilising application and grain handling equipment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Workplace maintenance hazards</th>
<th>may include</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• exposure to loud noise and fumes</td>
</tr>
<tr>
<td></td>
<td>• solar radiation</td>
</tr>
<tr>
<td></td>
<td>• dust and hazardous substances</td>
</tr>
<tr>
<td></td>
<td>• oil and grease spills</td>
</tr>
<tr>
<td></td>
<td>• electricity</td>
</tr>
<tr>
<td></td>
<td>• mechanical malfunctions and entanglement with machinery and equipment from exposed moving parts including hydraulics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal Protective Equipment</th>
<th>may include</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• boots</td>
</tr>
<tr>
<td></td>
<td>• hat/hard hat</td>
</tr>
<tr>
<td></td>
<td>• overalls</td>
</tr>
<tr>
<td></td>
<td>• gloves</td>
</tr>
<tr>
<td></td>
<td>• protective eyewear</td>
</tr>
<tr>
<td></td>
<td>• safety harness</td>
</tr>
<tr>
<td></td>
<td>• hearing protection</td>
</tr>
<tr>
<td></td>
<td>• respirator or face mask</td>
</tr>
<tr>
<td></td>
<td>• sun protection, eg, sun hat, sunscreen</td>
</tr>
</tbody>
</table>
Occupational Health and Safety requirements may include procedures for:

- operating and maintaining machinery and equipment including hydraulics and guarding of exposed moving parts
- hazard and risk control
- manual handling including lifting and carrying
- the provision of safety decals and signage
- handling, application and storage of hazardous substances
- outdoor work including protection from solar radiation, dust and noise
- lock out or danger tag procedures
- protection of people in the workplace
- the appropriate use, maintenance and storage of personal protective clothing and equipment

Regular maintenance checks may include:

- gauges, fan, engine oil, air cleaners, eg, wet and dry
- visible gaskets
- exhaust colour, tyres
- tracks
- track roller and carriers
- fuel and oil filters
- crankcase ventilation
- cooling systems
- belts and chains
- transmission
- gearbox
- hydraulic hoses
- hydraulic systems
- final drives
- oilers
- batteries and electrical systems
- level linkage wear
- oil and fuel leaks
- brakes
- Rollover Protection Systems/safety guards
- guards over exposed parts
- sources of hazardous noise

Machinery and equipment maintenance may include:

- operating checks
- daily checks
- programmed maintenance
- breakdown maintenance
- prescribed lubrication
Transmission checks may include

- clutches
- gearbox
- direct drive and power shaft transmission
- torque converter
- final drives

Tracks/wheels and undercarriage wear and tear checks may include

- sprockets
- idler wheels
- track roller frames
- track rollers
- carrier rollers
- track chains
- track shoes and grousers
- tyre pressure and abnormal wear patterns

Engine equipment may include

- oil/coolant levels
- filters
- oil
- air
- fuel
- air conditioner
- fuel filters
- crankcase vents
- air cleaners

Machine operational replacement wear components may include

- ground engaging components
- buckets
- blades
- cutter teeth and forks

Moving operational components may include

- elevator and loading chains
- cutters/knives
The sport and recreation industry covers

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered

- Assessment must confirm sufficient knowledge in maintaining specialised machinery and equipment
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's work environment
- In particular, assessment must confirm the ability to
  - properly maintain specialised machinery and equipment has been according to enterprise guidelines and industry best practice
  - transfer the skills and knowledge required to maintain specialised machinery and equipment to a range of work environments and contexts, eg, this could include different machinery and equipment, operational systems, maintenance procedures and working environments

Interdependent assessment of units

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Nil
Required knowledge and skills

- Required knowledge
  - Engine function principles
  - Turbo charging and after cooling
  - Assessing engine specifications in line with power requirements
  - All engine electric and hydraulic indicators and gauges
  - Transmission and drive systems
  - Safety including relevant Occupational Health and Safety issues, Occupational Health and Safety legislative requirements and codes of practice
  - Machinery and equipment operation principles
  - Occupational Health and Safety responsibilities of employees and employers
  - Hazard identification and control

- Required skills
  - Carry out engine/equipment checks
  - Carry out transmission checks
  - Maintain machinery and equipment components
  - Record maintenance

Resource implications

- Physical resources - assessment of this competency requires access to
  - engine equipment
  - personal protective equipment
  - machinery and equipment
  - appropriate documentation and resources normally used in the workplace

- Human resources - assessment of this competency will require human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
  - be competent in this unit
  - be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
  - have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A

Consistency in performance

- Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over a Range Statements and contexts applicable to the work environment
Context for assessment

- This unit of competency must be assessed in the context of a sport or recreation activity. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace.
- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes.
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
RTC3401A Control weeds

Unit Descriptor

This competency standard covers the process of controlling weeds, taking into consideration integrated pest management options. Implementation is likely to be under limited supervision from others with checking only related to overall progress. Responsibility for and limited organisation of the work of others may be involved. Implementation requires the application of knowledge in areas such as weed recognition, biology and control, and the lifecycles of weed predators and hosts.

Unit Sector Horticulture

ELEMENT PERFORMANCE CRITERIA

1. Assess weed infestation
   1.1 Scope and size of the infestation is assessed
   1.2 Weeds and beneficial organisms are identified and reported or recorded in field notes
   1.3 Levels of weed infestations tolerated by the client, market or environment are identified from the Integrated Pest Management (IPM) strategy
   1.4 Infestation levels, about which plant health or growth objectives are compromised are identified
   1.5 Professional advice is obtained as required according to enterprise guidelines

2. Plan the implementation of control measures
   2.1 Control measures suitable for the infestation are selected from Integrated Pest Management strategy
   2.2 Tools, equipment and machinery are selected from Integrated Pest Management strategy
   2.3 Occupational Health and Safety hazards are identified, risks assessed, controls implemented and reported to the supervisor
   2.4 Suitable safety equipment and Personal Protective Equipment (PPE) are selected, used, maintained and stored
   2.5 Control measures selected need to be in full consideration of environmental implications

3. Implement control measures
   3.1 Enterprise work team, contractors and Integrated Pest Management product suppliers are coordinated in a sequential, timely and effective manner in consultation with the supervisor
   3.2 Control measures are implemented according to the Integrated Pest Management standards or industry Code of Practice
   3.3 Implementation of Integrated Pest Management activities is undertaken according to Occupational Health and Safety requirements
   3.4 A clean and safe work area is maintained throughout and on completion of each work activity
   3.5 Records are maintained as required by legislation and enterprise guidelines
4. Monitor control methods

4.1 Control methods are monitored to identify side effects to other plants, animals or external environment

4.2 Effectiveness of control methods are assessed in reference to specified industry and enterprise standards

4.3 Adjustments to Integrated Pest Management control methods are implemented where necessary to meet enterprise specifications

## KEY COMPETENCIES

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Written, oral and telecommunications of ideas and information relating to Integrated Pest Management implementation, activities and problems encountered will be required with the supervisor, work group, contractors or consultants</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Enterprise work procedures and Integrated Pest Management program should be consulted, interpreted and applied to coordinate weed control activities with further clarification sought from the supervisor, contractors or consultants where necessary</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>For the work group, contractors and self will be planned prior to and adjusted during implementation of the Integrated Pest Management program</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Implementation of the Integrated Pest Management program will involve facilitating and leading members of a team to complete Integrated Pest Management activities, and meet Integrated Pest Management standards and specifications on time and budget</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Will be required to implement the spatial and logistical and quantitative requirements of the Integrated Pest Management program</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Site contingencies, personnel difficulties and control and timeline failure may require problem-solving techniques</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>To access and apply Integrated Pest Management specifications to work activities, undertake Integrated Pest Management activities, communicate and keep records</td>
<td>3</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

Weeds may include those which

- present a potential risk for the enterprise, industry or environment
- are notifiable to authorities
- are part of a local, regional, State or national strategy

Beneficial organisms may include

- volunteer or cultivated plants that out-compete the weed, insects and other non-vertebrates, and micro-organisms that attack the weed

Control measures employed as part of an Integrated Pest Management program may include

- targeted chemical application
- the application of non-chemical controls including
  - organically or naturally ingredient based sprays
  - controlled release of predatory organisms
- the application of cultural control methods including removal and disposal of weeds

Tools, equipment and machinery required may include

- standard horticultural tools such as gardening implements
- mechanised and manually operated spray applicators and cultivators
- tractor and trailed equipment may be required
- monitoring equipment for the implementation of an Integrated Pest Management program may include
  - insect traps
  - soil
  - fertiliser and plant tissue test kits
  - sampling equipment

Occupational Health and Safety hazards may include

- chemicals and hazardous substances
- manual handling
- operating machinery tools and equipment
- noise
- dust
- solar radiation
- falls and tripping
Personal Protective Equipment may include

- hat
- boots
- overalls
- gloves
- goggles
- respirator or face mask
- hearing protection
- sunscreen lotion

Environmental implications associated with controlling weeds may include

- beneficial environmental impacts
  - where reduced and informed targeting of chemicals, fertilisers and water to the site and recycling within the system, result in minimal escape of contaminants to the external environment
  - beneficial impacts may also result from improved production, healthier ecosystems, more efficient water and nutrient utilisation and reduced weed numbers
- detrimental environmental impacts may arise where
  - Integrated Pest Management activities produce excess noise, dust or water, or the systems do not function effectively because of inadequate implementation techniques

Integrated Pest Management Standards may include

- those established by registered industry associations
- clients or markets of the enterprise
- land management agencies or quality assurance program

Occupational Health and Safety requirements may include

- identifying hazards, assessing risks and implementing controls
- cleaning, maintaining and storing tools, equipment and machinery
- appropriate use, maintenance and storage of Personal Protective Equipment including
  - sun protection
  - safe operation of tools
  - equipment and machinery
- safe handling
- use and storage of chemicals
- organically based materials and hazardous substances
- correct manual handling
- basic first aid
- safety procedures for protection of others
- personal hygiene
- reporting problems to supervisors
Clean and safe work area may include tasks

- disabling unused tools, equipment and machinery and storing neatly out of the way of Integrated Pest Management activities
- correct storage of personal protective equipment
- safely storing materials on site, and swiftly and efficiently removing and processing debris and waste from the work area

Records applied to controlling weeds may include

- types of weeds and beneficial organisms present
- numbers of weeds and beneficial organisms present
- treatments applied
- date of application
- application rates
- success of treatment
- economic thresholds

The sport and recreation industry covers

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself
EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered

• Assessment must confirm sufficient knowledge in controlling weeds
• Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's environment
• In particular, assessment must confirm the ability to
  • observe the successfully planning, implementation and monitoring of weed control measures, according to enterprise guidelines and industry best practice
  • transfer the skills and knowledge required to control weeds to a different work environment, eg, this could include different weed species, enterprise situations and control methods

Interdependent assessment of units

• This unit must be assessed after attainment of competency in the following unit(s)
  • Nil
• This unit must be assessed in conjunction with the following unit(s)
  • Nil
• For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  • Nil
Required knowledge and skills

- **Required knowledge**
  - Weed recognition
  - Economic, aesthetic or environmental thresholds for a range of weeds
  - Chemical, biological and cultural control methods and treatments available to the enterprise within the parameters of an Integrated Pest Management program
  - Range and use of tools, equipment and machinery available to the enterprise for implementing the control measures
  - Range of site monitoring and analysis techniques that may be used to implement and Integrated Pest Management program
  - Association of Integrated Pest Management methods with site limitations, environmental implications, end market and horticultural objectives for the site
  - Occupational Health and Safety issues and legislative requirements associated with hazardous substances, regulations and Codes of Practice
  - Occupational Health and Safety responsibilities of employers and employees
  - Correct wearing/fit of personal protective equipment

- **Required skills**
  - Recognise a range of weeds and beneficial organisms within a particular enterprise
  - Communicate with work team members, supervisors, contractors and consultants
  - Utilise proforma reporting, analysis and work procedure documents
  - Understand Integrated Pest Management symbols and information
  - Interpret and apply Integrated Pest Management program spatial and logistical specifications
  - Correct fitting, cleaning and storage of personal protective equipment
  - Interpret and apply test results and calculate the quantities and application rates of control materials
  - Coordinate work group, contractors and own activities to sequentially and effectively complete Integrated Pest Management activities in a timely and cost effective manner
Resource implications

- Physical resources - assessment of this competency requires access to
  - tools, equipment and machinery
  - personal protective equipment
  - appropriate documentation and resources normally used in the workplace
- Human resources - assessment of this competency will require human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
  - be competent in this unit
  - be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
  - have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A

Consistency in performance

- Competency in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable to the work environment

Context for assessment

- This unit of competency must be assessed in the context of a sport or recreation activity. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace
- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
RTC3404A Control plant pests, diseases and disorders

Unit Descriptor
This competency standard covers the process of controlling plant pests, diseases and disorders taking into consideration integrated pest management options. Implementation is likely to be under limited supervision from others with checking only related to overall progress. Responsibility for and limited organisation of the work of others may be involved. Implementation requires the application of knowledge in areas such as pests and disease recognition, lifecycles, biology and control, and predators and hosts.

Unit Sector Horticulture

ELEMENT PERFORMANCE CRITERIA

1. Assess pests and disease infestation
1.1 Scope and size of the infestation is assessed
1.2 Plants pests, diseases and disorders and beneficial organisms are identified and reported or recorded in field notes
1.3 Levels of pest infestations tolerated by the client, market or environment are identified from the Integrated Pest Management (IPM) strategy

2. Plan the implementation of control measures
2.1 Control measures suitable for the infestation are selected from Integrated Pest Management strategy
2.2 Tools, equipment and machinery are selected for each work activity according to enterprise work procedures
2.3 Occupational Health and Safety hazards are identified, risks assessed, controls implemented and reported to the supervisor
2.4 Suitable safety equipment and personal protective equipment (PPE) are selected, used, maintained and stored
2.5 Control measures selected need to be in full consideration of Occupational Health and Safety and environmental implications

3. Implement control measures
3.1 Enterprise work team, contractors and Integrated Pest Management product suppliers are coordinated in a sequential, timely and effective manner in consultation with the supervisor
3.2 Control measures are implemented according to the Integrated Pest Management standards or industry Code of Practice
3.3 Implementation of Integrated Pest Management activities is undertaken according to Occupational Health and Safety requirements
3.4 A clean and safe work area is maintained throughout and on completion of each activity
3.5 Records are maintained as required by legislation and enterprise guidelines

4. Monitor control methods
4.1 Control methods are monitored to identify side effects to other plants, animals or external environment
4.2 Effectiveness of control methods are assessed in reference to specified industry, Occupational Health and Safety and enterprise standards
4.3 Adjustments to Integrated Pest Management control methods are implemented where necessary to meet enterprise specifications
### KEY COMPETENCIES

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Written, oral and telecommunication of ideas and information relating to Integrated Pest Management implementation, activities and problem encountered will be required with the supervisor, work group, contractors or consultants</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Enterprise work procedures and Integrated Pest Management program should be consulted, interpreted and applied to coordinate plant pest, disease and disorder control activities with further clarification sought form the supervisor, contractors or consultants where necessary</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Work activities for the work group, contractors and self will be planned prior to and adjusted during implementation of the Integrated Pest Management program</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Implementation of the Integrated Pest Management program will involve facilitating and leading members of a team to complete Integrated Pest Management activities, and meet Integrated Pest Management standards and specifications on time and budget</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Will be required to implement the spatial and logistical and quantitative requirements of the Integrated Pest Management program</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Site contingencies, personnel difficulties, control and timeline failures and identifying, assessing and controlling hazards may require problem solving techniques</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technological understanding will be required to access and apply Integrated Pest Management specifications to work activities, undertake Integrated Pest Management activities, communicate and take records</td>
<td>2</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

**Plant pests, disease and disorders** which
- present a potential risk for the enterprise, industry or environment
- are notifiable to authorities
- are part of a local, regional, state or national strategy

**Beneficial organisms** may include
- volunteer or cultivated plants, insects, spiders and microorganisms that out-compete
- parasitise or predate on the pests and disease relevant to the Integrated Pest Management program

**Control measures** employed as part of an Integrated Pest Management program may include
- targeted chemical application
- the application of non-chemical controls including organically or naturally ingredient based sprays
- controlled release of predatory organisms
- the application of cultural control methods including removal and disposal of plant pests, diseases and disorders

**Tools, equipment and machinery** which may be required may include
- standard tools, such as
  - gardening implements
  - mechanised and manually operated spray applicators and cultivators
  - tractors and trailed equipment may be required
- monitoring equipment for the implementation of an Integrated Pest Management program may include
  - insect traps
  - soil
  - fertiliser and plant tissue test kits
  - sampling equipment
Occupational health and safety hazards may include
- chemicals and hazardous substances
- manual handling
- falling branches
- overhead powerlines
- operating machinery tools and equipment
- noise
- dust
- solar radiation

Personal protective equipment may include
- hat
- boots
- overall
- gloves
- goggles
- respirator or face mask
- hearing protection
- sunscreen lotion

Environmental implications associated with controlling plant pests, diseases and disorders may include
- beneficial environmental impacts
  - where reduced and informed targeting of chemicals, fertilisers and water to the site and recycling within the system, result in minimal escape of contaminants to the external environment
  - beneficial impacts may also result from improved production, healthier ecosystems, more efficient water and nutrient utilisation, and reduced pest numbers
- detrimental environmental impacts
  - may arise where Integrated Pest Management activities produce excess noise, dust or water, or the systems do not function effectively because of inadequate implementation techniques

IPM standards may include
- those established by registered industry associations, clients or markets of the enterprise, land management agencies or quality assurance program
Occupational Health and Safety requirements may include

- identifying hazards
- assessing risks and implementing controls
- cleaning, maintaining and storing tools, equipment and machinery
- appropriate use, maintenance and storage of Personal Protective Equipment including
  - sun protection
  - safe operation of tools, equipment and machinery
  - safe handling
  - basic first aid
  - personal hygiene
  - reporting problems to supervisors and safety procedures for the protection of others

Maintaining clean and safe work areas may include tasks

- disabling unused tools, equipment and machinery and storing neatly out of the way of Integrated Pest Management activities
- safely storing neatly out of the way of Integrated Pest Management activities
- safely storing materials on site, and swiftly and efficiently removing and processing debris and waste from the work area

Records for controlling plant pests, diseases and disorders may include

- types of plant pests, diseases and disorders and beneficial organisms present,
- numbers of pests and beneficial organisms present
- treatments applied
- date of application
- application rates
- success of treatments
- economic thresholds
- accident and dangerous occurrence records
The sport and recreation industry
covers

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered

- Assessment must confirm sufficient knowledge in implementing and integrated pest management (IPM) program
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's work environment
- In particular, assessment must confirm the ability to
  - prepare for Integrated Pest Management activities
  - coordinate work activities
  - monitor and apply control methods to pests or diseases within the parameters of Integrated Pest Management standards and specifications
  - transfer the skills and knowledge required to control plant pests, diseases and disorders to a different work environment, eg, this could include different plant pests, diseases and disorders, enterprise situations and control methods

Interdependent assessment of units

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Nil
Required knowledge and skills

- Required knowledge
  - Pests and disease recognition
  - Economic, aesthetic or environmental thresholds for a range of plant pests, diseases and disorders
  - Chemical, biological and cultural control methods and treatments available to the enterprise within the parameters of an Integrated Pest Management program
  - Range and use of tools, equipment and machinery available to the enterprise for implementing the control measures
  - Range of site monitoring and analysis techniques that may be used to implement and Integrated Pest Management program
  - Association of Integrated Pest Management methods with site limitations, environmental implications, end market and production or environmental objectives for the site
  - Occupational Health and Safety responsibilities for employees and employers
  - Occupational Health and Safety procedures
  - Occupational Health and Safety legislative requirements including hazardous substances regulations and Codes of Practices
  - Correct wearing/fit of personal protective equipment

- Required skills
  - Recognise a range of pests, diseases and beneficial organisms within a particular enterprise
  - Communicate with work team members, supervisors, contractors and consultants
  - Interpret and apply the Integrated Pest Management Program
  - Utilise proforma reporting, analysis and work procedure documents
  - Understand Integrated Pest Management symbols and information
  - Interpret and apply Integrated Pest Management program spatial and logistical specifications
  - Interpret and apply test results, and calculate the quantities and application rates of control materials
  - Coordinate work groups, contractors and own activities to sequentially and effectively complete Integrated Pest Management activities in a timely and cost effective manner
Resource implications

- Physical resources - assessment of this competency requires access to
  - tools, equipment and machinery
  - personal protective equipment
  - appropriate documentation and resources normally used in the workplace
- Human resources - assessment of this competency will require human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
  - be competent in this unit
  - be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
  - have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A

Consistency in performance

- Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable to the work environment

Context for assessment

- This unit of competency must be assessed in the context of a sport or recreation activity. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace
- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guideline. Further advice may also be sought from the relevant sector booklet.
RTC3701A Respond to emergencies

Unit Descriptor
This competency standard covers the process of recognising and responding to emergencies and implementing a range of life support measures across a broad spectrum of situations/incidents. It requires the ability to accurately evaluate the emergency, avoid/control escalation of the emergency, efficiently implement a plan of action, and render first aid care. Responding to emergencies requires knowledge of Occupational Health and Safety legislation and regulations, the emergency network, and first aid casualty management principles.

Note: Element 5 and First Aid components of the underpinning knowledge in the Evidence Guide of this competency standard can be satisfied through successful completion of St John's Basic Life Support (Level 2) Certificate, the Australian Red Cross' Senior First Aid Certificate or equivalent.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare for emergency situations
   1.1 Appropriate actions are taken to maximise safety and minimise health hazards in the workplace.
   1.2 Options for action in cases of emergency are identified and evaluated.
   1.3 Organisational emergency procedures and policies are correctly implemented as part of the workplace procedures.
   1.4 Occupational health and safety procedures and safe working practices are applied including the selection of personal protective equipment (PPE) to suit the emergency situation.
   1.5 Regular checks of the workplace are carried out to minimise potential hazards.
   1.6 Emergency procedures are carried out as required by established workplace procedures.
   1.7 Safety equipment and aids required for emergencies are selected, used, maintained and stored in good order.
   1.8 Near misses and potential hazards are reported to supervisor and/or documented according to enterprise guidelines.

2. Implement fire prevention and control on site and in the workshop
   2.1 Fire hazards are minimised as specified in workplace and/or fuelling procedures.
   2.2 Appropriate fire extinguishers and fire fighting equipment are used in fire situations, and appropriate authority notified according to established procedures.
   2.3 Evacuation procedures are followed according to enterprise policy and plan including nominated assembly points.
   2.4 Where required, specific safety procedures for the handling and use of industrial gases are carried out in line with standard industry practice and regulations.
3. Evaluate the emergency

3.1 Emergency and potential emergency situation reports and signals are promptly recognised and assessed.

3.2 Advice is sought from relevant people in evaluating the emergency.

3.3 The possible development of the emergency situation is assessed and further potential hazards to staff and/or clients are evaluated.

3.4 Needs, including those for assistance, are prioritised promptly and accurately.

4. Act in an emergency

4.1 The plan of action is implemented using techniques appropriate to the situation and available resources and abilities.

4.2 Equipment is operated safely and, where necessary, equipment and techniques are improvised.

4.3 Strategies for group control are identified and implemented, and clients and other individuals are removed from danger.

4.4 The condition of all staff and others assisting is constantly monitored.

4.5 The information required to assist emergency services, where relevant, is acquired and documented.

4.6 Emergency services are notified as necessary.

4.7 The plan of action is changed to accommodate changes in the situation variables.

4.8 Casualty evacuation methods are demonstrated where relevant to the context.

4.9 Organisational procedures and policies and legal requirements are correctly implemented in the event of a major injury or death.

5. Apply essential first aid techniques

5.1 Immediate risk to self and casualty's health and safety are minimised by isolating the hazard.

5.2 The casualty's injuries and vital signs are assessed.

5.3 Casualty is reassured in a caring and calm manner and made comfortable using available resources.

5.4 First aid care is provided in accordance with established first aid procedures.

5.5 First aid assistance is sought from others as appropriate.
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Verbally including through communication systems.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Observation and reporting to supervisor or appropriate authorities.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>According to Occupational Health and Safety practices and policies.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Through reacting to emergency situations in a coordinated way.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Determining pulse rates.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Identifying solutions to preserve life or counteract emergencies.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Use of communications equipment.</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

What might workplace procedures refer to?

Search procedures (search of likely routes followed, systematic search, voice or whistle contacts), evacuations, use of isolating equipment, prevention of escalation of risk, containment, clean up, control of fire, administering of first aid, assistance to injured team member, retrieval of team member and activity-specific rescue techniques.

Where may occupational health and safety requirements be found?

State/Territory/Commonwealth legislation, Australian Standards, Occupational Health and Safety legislation, industry Codes of Practice and organisation's policies and procedures and Material Safety Data Sheets (MSDSs).

What personal protective equipment is relevant to this standard?

Firefighter protective clothing, helmets and hardhats, boots, gloves, breathing apparatus, protective clothing, protective hose lines or sprays, safety eye washes and safety showers.
| **Which industrial gases may be included?** | Compressed and liquefied fuel gases, oxygen, acetylene, nitrogen, anhydrous ammonia and carbon dioxide. |
| **What emergencies may be relevant to this standard?** | Fire, hazardous releases, fuel spillage, gases, chemical spills, bomb threats, civil disorder, medical (e.g., bites, stings, epileptic fit, heart attack), road accidents, injury from machinery and equipment, fall, climbing accident, swimming or diving accident, snake bite or poisoning, respiratory or cardiac arrest, and electrocution, injuries, panic and other emotional responses, equipment failure, lost team or team member, result of environmental conditions (e.g., heat, cold, wet, snow, wind, lightning, bushfires, floods, high seas), and activity-specific. |
| **Who may be classified as relevant people?** | Managers, OHS officers, workplace first aiders, fire wardens, emergency service people, other external experts and consultants. |
| **What types of hazards could this standard refer to?** | Biological, chemical, mechanical, electrical, thermal, explosive, structural, climatic, psychological (e.g., critical incident stress), nuclear, proximity of other people, vehicles and machinery, fire, gas, fumes, electrical situations, security related and wildlife related situations. |
| **What injuries might be relevant to this standard?** | Shock, external bleeding, burns, limb, abdominal and pelvic injuries, head and neck injuries, poisoning, bites and stings, facial injuries and management of a casualty with chest pains, who is fitting, who is known to have diabetes and collapses, who is choking, who is drowning, who has a swollen neck, who has asthma, who is not breathing, who is suffering from overexposure, who is suffering from a chest injury, and/or who has been hit by a motor vehicle or injured by machinery and equipment. |
| **Who may be classified as others in this competency standard?** | Participants in an activity or program, colleagues, general public, small group or larger group, experienced or inexperienced personnel. |
| **What might be classified as a development of the situation?** | Spread of fire, threat to adjoining areas, danger of explosion, loss of communications and involvement of additional persons. |
| **What emergency reports and signals are included?** | Observation, verbal, emergency warning system, emergency alarm system, hand signals, verbal reports, telephone communications, radio communications and whistles. |
| **What emergency services may be relevant to this standard?** | Police Search and Rescue, State Emergency Service, Fire Brigade, Ambulance Service, Land Management Authorities (e.g., National Parks, Forestry) and Australian Volunteer Coastguard. |
Who may be classified as management authorities?

Land and facility owners, city councils, local government authorities, national parks and forestry services, fisheries departments, agricultural producers, private land owners, crown land lessees, defence forces, Aboriginal communities, water authorities and utility agencies and commissions.

What situation variables may apply to this standard?

Capabilities of the group/clients, weather conditions, topography, time factors, human resources, available food and water, size of search area, distance from emergency response providers, delays in accessing emergency help, time of day, communications facilities and difficulties, and emotional and physical condition of casualties.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in responding to an emergency requires evidence that an individual has the skills and knowledge to recognise and respond to an emergency appropriately to a broad range of situations. The skills and knowledge required to respond to emergencies must be transferable to a range of work environments and contexts. For example, this could include different workplace environments, emergencies and situation variables.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- The use of safe working practices.
- The emergency network.
- Enterprise plan and evacuation procedures.
  - OHS legislative requirements and Codes of Practice.
  - Legal responsibilities and Duty of Care.
  - Use of communications equipment.
  - Organisational and legal policies and procedures in the event of an accident/incident.
  - Local call out procedures to access emergency services personnel.
  - Practical first aid skills using prepared and improvised materials.
  - Hazard identification, assessment and control.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Accurately evaluate the emergency.
- Avoid/control escalation of the emergency.
- Develop a plan of action decisively.
- Efficiently implement a plan of action.
- Render first aid care.
- Deal with contingencies.
- Communicate with others.
Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
### RTC3704A Prepare and apply chemicals

#### Unit Descriptor
This competency standard covers the process of preparing and applying chemicals for the control of weeds, pets, and diseases. It requires knowledge of the chemicals related to the workplace, the hazards and risks involved in their use, and the specific safety procedures prescribed for working unsupervised within organisational guidelines. It requires the ability to handle and apply chemicals ensuring minimum risk to self, others and environment and accurately record their use.

#### Unit Sector
Horticulture

#### ELEMENT PERFORMANCE CRITERIA

1. **Determine the need for chemical use**
   - 1.1 Nature and level of the pest, weed infestation or disease as identified
   - 1.2 Need for action is assessed
   - 1.3 Assess the requirement for chemical use as an option within an integrated pest management strategy
   - 1.4 Hazard and risk analysis of different chemical options is undertaken
   - 1.5 Requirement for chemical application including coverage by appropriate insurance is identified and confirmed

2. **Prepare appropriate chemical**
   - 2.1 Chemical label and Material Safety Data Sheets (MSDS) are read and understood
   - 2.2 Labels are checked to ensure chemicals meet user requirements and specifications
   - 2.3 Chemicals are prepared from those registered for the intended purpose, and to suit the organisation's chemical use strategy
   - 2.4 **Legislation and regulations** concerning chemical use are identified and followed
   - 2.5 **Occupational Health and Safety (OHS) hazards and risks** and **risk control requirements** associated with use of the chemicals are identified

3. **Prepare to use chemicals according to the label and MSDS**
   - 3.1 **Personal protective equipment** is selected and checked for use according to the product label and Material Safety Data Sheets
   - 3.2 Requirements for **pre and post-operative checks** on equipment are followed
   - 3.3 Damage, wear or malfunctions of any equipment is identified and reported or repaired
   - 3.4 Requirements for the selection, preparation and adjustment of **application equipment and tools** for the appropriate chemicals are followed
   - 3.5 Mixing rates are defined and calculated
   - 3.6 **Directions, standards** and legislative requirements for mixing chemicals are followed
4. Apply chemicals

4.1 **Meteorological conditions** and forecasts are assessed prior to and during application

4.2 **Hazards** of particular chemicals are identified

4.3 **Risks** to others and the environment are assessed and controlled

4.4 Application equipment calibration procedures are followed

4.5 Procedures and precautions for the use of the chemicals are interpreted from labels and accreditation requirements

4.6 Requirements for chemical handling and application are determined from directions, standards and legislative requirements

4.7 Chemicals are applied safely and effectively according to directions

4.8 Chemical spills or accident procedures are followed

4.9 First aid equipment is made available on site

5. Clean up following chemical application

5.1 **Tools or equipment** required to clean up chemicals are selected

5.2 Requirements for cleaning equipment and sites are defined and followed according to directions and standards

5.3 Requirements for disposing of unused chemicals, empty containers or spilled material are defined from directions and standards

5.4 Procedures for reporting chemical spills are followed

6. Record application details

6.1 Application of chemicals is recorded according to organisational procedures

6.2 Details of the specific chemical concerned are recorded correctly in the chemical inventory according to regulations

6.3 Inventory of personal protective equipment and application equipment is recorded

6.4 Procedures and requirements for reporting application details to senior management or client are followed

6.5 Records of injury or poisoning associated with application of chemical are made and provided to the **appropriate person**
KEY COMPETENCIES

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Reporting and recording information about chemical application</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>In labels, directions, standards and accreditation conditions (in the case of prescribed chemicals), need to be interpreted and analysed</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Planning the application of chemicals in conjunction with other workplace activities</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>A chemical strategy may be implemented in a team through health and safety meetings</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Calibration of equipment, mixing chemicals and calculations</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Matching the correct chemical to the problem and ensuring that all accreditation conditions are met</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Recording information may require the use of appropriate technology</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

**Chemicals**  
may include  
• insecticides  
• fungicides  
• herbicides  
• bactericides  
• algaecides  
• bio-agents  
• nematocides  
• rodenticides  
• antimicrobial agents  
• anthelmintics  
• hormone growth promotants or a range of veterinary chemicals used to treat animals for disease

**Legislation and regulations**  
may include  
• Poisons Act or Protection of the Environment Acts
**Occupational Health and Safety risks** may include

- exposure of the operators and others in the workplace to the absorption of chemicals through the skin and by inhalation and ingestion
- risk include
  - acute poisoning
  - chronic or long-term health effects
  - lack of appropriate insurance coverage

**Occupational Health and Safety risk control requirements** may include

- safe application techniques
- use and maintenance of personal protective equipment
- safe wash down procedures
- safe procedures for container rinsing and management

**Personal Protective Equipment** may include

- boots
- overalls
- chemical resistant gloves
- aprons
- face shields
- respirators or hats

**Pre and post operational checks** may be made to

- weather conditions, eg, wind
- nozzles
- hoses
- regulators/gauges
- respirator cartridges
- drench and protective clothing and equipment

**Application equipment** may include

- knapsacks or hand held pneumatic sprayers
- drench guns
- spot on applicators
- Controlled Droplet Application (CDA) and air assisted units
- self-propelled sprayers
- controllers or power operated equipment like boomsprays
- pressure wands
- jetting race
- shower/plunge dips
- hand jetting or air blast sprayer
Directions and standards may include

- the instructions on the chemicals label
- in an operator's manual
- on a Material Safety Data Sheets
- in an industry standard
- from Codes of Practice and advisory material explaining legislation relevant to chemical use

Hazards

- will be listed on
  - labels and the Material Safety Data Sheets for the chemical concerned and may include flammability
  - toxicity, health standards
  - damage to non-target organisms
  - uneven surfaces
  - trip points
  - solar radiation
  - manual handling
  - faulty equipment
  - environmental damage or residues in foods

Risks that may be assessed

- include spillage
- contact of chemical with skin or eyes
- accidental ingestion
- incorrect concentrations in mixtures
- faulty or inappropriate storage containers
- incorrectly calibrated equipment
- spray drift
- contamination of waterways
- incorrect disposal of unused chemicals or faulty equipment

Meteorological conditions that may be assessed will include

- rain
- wind
- temperature
- relative humidity
- inversion or stable air conditions

Tools and equipment include

- washing soda
- chlorine
- containers for disposal of chemicals
- non-flammable absorbent materials and shovels
- booms
- sausages and sandbags

Organisational procedures for recording may include

- written journal or computer records
Appropriate persons for receiving accident and spill reports include:
- relevant authorities
- supervisor
- manager
- business owner or colleague

The sport and recreation industry covers:
- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered:
- Assessment must confirm sufficient knowledge in preparing and applying chemicals
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's work environment
- In particular, assessment must confirm the ability to:
  - work unsupervised to prepare and correct chemical for the problems
  - apply the chemical according to safe work practice and legislation and ensure minimal effects on the environment and others
  - transfer the skills and knowledge required to prepare and apply chemicals to a different work environment, eg, this could include different chemicals, application methods and workplaces
**Interdependent assessment of units**

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Nil

**Required knowledge and skills**

- Required knowledge
  - Chemical free options for pest control
  - Occupational Health and Safety issues, legislative requirements and Codes of Practice relevant to chemical use and hazardous substances
  - Use, maintenance and storage of equipment to prepare and apply chemicals
  - Use, maintenance and storage of personal protective equipment, including how, when and why it should be used
  - Licensing requirements and relevant State authorities
  - Modes of chemical absorption and paths of entry associated with risks to bystanders/public and applicators
  - Environmental effects of chemicals
  - Drift management
  - Calibration and adjustments
  - Integrated Pest Management and Integrated Resistance Management principles
  - Cost effective use of chemicals
  - Hazard identification, assessment and control, and emergency response
  - Correct wearing/fit of personal protective equipment
- Required skills
  - Communicate orally and in writing
  - Read and interpret labels
  - Measure quantities, application rates and calibrate equipment
  - Report on and record activities
  - Use safe and environmentally responsible work practices
Resource implications

- Physical resources - assessment of this competency requires access to
  - application equipment
  - tools and equipment
  - personal protective equipment
  - appropriate documentation and resources normally used in the workplace
- Human resources - assessment of this competency will require
  - human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
    - be competent in this unit
    - be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
    - have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A
  - where this competency standard is being used as part of an accreditation or licence for purchase or use of chemicals, the assessor must meet the requirements of the issuing body; this may include
    - accreditation with that issuing body
    - maintenance of current competency in this and the following standards
      - RTC3705A - Transport, handle and store chemicals
      - RTC4702A - Minimise risks in the use of chemicals
      - RTC4703A - Plan and implement a chemical use program
    - involvement in professional development programs comprising technical and legislative updates on an annual basis

Consistency in performance

- Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable in the work environment

Context for assessment

- This unit of competency must be assessed in the context of a sport or recreation activity. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace
- Assessment of this unit of competency will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons
| Essential Assessment Information | There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet. |
RTC3705A Transport, handle and store chemicals

This competency standard covers the process of transporting, handling and storing chemicals safely without supervision. It requires minimising risks, including avoiding spills and accidents, and following procedures, safety and environmental regulations, and Occupational Health and Safety (OHS) requirements to protect the health and safety of everyone in the workplace when handling chemicals. It requires knowledge of the chemicals used in a particular environment and the hazards involved in their handling and storage.

NB: This competency standard may be deemed to have a time limit when used as part of an accreditation or licence to purchase or use chemicals

Unit Sector Horticulture

ELEMENT PERFORMANCE CRITERIA

1. Transport and handle chemicals and biological agents
   1.1 Transport methods according to label and Material Safety Data Sheets (MSDS) are identified and confirmed to safely transport the chemical
   1.2 Risks involved in transport and handling are identified and minimised
   1.3 Personal Protective Equipment (PPE) is used to transport and handle chemicals where required
   1.4 Requirements for safe working procedures and legislation are recognised and followed during transport
   1.5 Procedures and risk control measures are in place and followed in the event of a spill or accident
   1.6 Reports of injury or poisoning associated with transport of chemicals are made to the manager

2. Store chemicals in the workplace
   2.1 Storage method selected is appropriate for the chemical concerned
   2.2 Occupational Health and Safety hazards in the storage area are identified and risks controlled
   2.3 Storage method selected is appropriate to prevent contact with people or animals, and contamination of produce or the environment
   2.4 Requirements to maintain storage area in accordance with directions and standards related to chemicals are defined
   2.5 Safe working procedures for the storage of chemicals are defined

3. Record storage details
   3.1 Chemical store inventory is maintained
   3.2 Requirements to maintain storage area in accordance with Occupational Health and Safety and enterprise requirements
   3.3 Records of injury or poisoning associated with transport and storage of chemicals are made and provided to the manager
KEY COMPETENCIES

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>About the transport arrangements for chemicals will need to be communicated to relevant authorities, supervisor and colleagues</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>About hazards and risks associated with transporting chemicals will be collected and analysed</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Transport and storage will need to occur without harming or interrupting other workplace activities</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Ensuring others are aware of transport of chemicals, and the hazards and control measures</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Amounts of chemicals that can be safely transported in one load and how they can be stored</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Difficulties with transport vehicles or the storage area may require problem solving</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>The use of the storage manifest may require use of appropriate technology</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

**Chemicals** may include

- insecticides
- fungicides
- herbicides
- bactericides
- algaecides
- biological
- nematacides
- rodenticides
- antimicrobial agents
- antelintics
- hormone growth promotants
- molluscicides and avicides
- a range of veterinary chemicals used to treat animals for disease
Risks

which that need to be minimised may include

• serious potential affects on worker's health during transport due to spillage or accident, poisoning
• affects on public health through possible cross-contamination of produce
• damage to the environment and the general public in the event of spillage or leakage during transport
• lack of appropriate insurance coverage
• chemicals flowing into drains, water sources or produce growing areas

Hazards and risks

may occur during transport of chemicals and may include

• contact with chemicals through the skin, inhalation or ingestion may cause acute poisoning, or chronic or long-term health effects
  • these may occur through direct contact with a spilled chemical, or through contamination of food
• Material Safety Data sheets (MSDS) provide health information
• other hazards and risks include fire and explosion

Personal Protective
Equipment

may include

• boots
• overalls
• chemical resistant gloves
• aprons
• face shields
• respirators or hats

Hazards

will be listed on

• labels and the MSDS for the chemical concerned and may include
  • flammability
  • toxicity
  • health hazards
  • damage to non-target organisms
  • environmental damage or residues in foods

Storage methods

may include

• on site or off site approved drums, bottles or containers

Equipment found in storage areas

may include

• specific dispensing and preparation equipment
• recording of processes and use
• associated safety equipment such as eyewash and emergency showers
Directions and standards may include
• directions on a label, in an operator's manual
• on a Material Safety Data Sheets
• in an industry standard, or from Codes of Practice
• advisory material outlying legislation relevant to chemical use
• regulations to be followed may include segregation, wash down areas and sumps

Safe working procedures may include
• following manufacturers instructions
• separating chemicals from passengers
• observing loading instructions
• ensuring liquids are top side up
• ensuring chemicals are correctly labelled
• ensuring no cross-contamination
• safe driving and vehicle operation
• ensuring load is not stacked too high
• ensuring the chemicals are protected from the weather
• ensuring the load is secure

Legislation may include
• Pesticides Acts
• Occupational Health and Safety Acts and associated Hazardous Substances Regulations / Codes of Practice
• Dangerous Goods Acts
• Poisons Schedule or Protection of the Environment Acts

Procedures may include
• directions on labels
• Material Safety Data Sheets
• Occupational Health and Safety and environmental regulations or operator's manuals
• may cover
  • cleaning the site
  • monitoring and protecting the environment where possible
  • securing the area and notifying authorities
The sport and recreation industry covers

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered

- Assessment must confirm sufficient knowledge in transporting, handling and storing chemicals safely without supervision
- Assessment of performance should be over a period of time covering all categories from all the Range Statements applicable to the learner’s work environment
- In particular, assessment must confirm the ability to
  - safely and securely transport
  - handle and store chemicals in the workplace without harming people, foodstuffs or the environment
  - transfer the skills and knowledge required to transport and store chemicals to other workplaces, eg, This could include different transport methods, storage structures and workplaces

Interdependent assessment of units

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Nil
Required knowledge and skills

- Required knowledge
  - Australian Standards Association (ASA) levels and standards
  - Risks to the environment
  - Different methods of transport
  - Occupational Health and Safety risks management principles as they apply to hazardous substances
  - Hazards and risks involved in the transport of the specific chemical concerned and related control measures
  - Relevant Occupational Health and Safety legislative requirements and Codes of Practice with regard to hazardous substances and the use of chemicals
  - Correct wearing/fit of personal protective equipment

- Required skills
  - Accurate read and interpret instructions for transporting and handling chemicals
  - Accurately read and interpret instructions for action to be taken to control and minimise the effects of a spillage of chemicals
  - Communicate with others regarding transport and storage processes

Resource implications

- Physical resources - assessment of this competency requires access to
  - personal protective equipment
  - appropriate documentation and resources normally used in the workplace

- Human resources - assessment of this competency will require
  - human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
    - be competent in this unit
    - be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
    - have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A
  - where this competency standard is being used as part of an accreditation or licence for purchase or use of chemicals, the assessor must meet the requirements of the issuing body. This may include
    - accreditation with that issuing body
    - maintenance of current competency in this and the following standards
      - RTC3704A - Prepare and apply chemicals
      - RTC4702A - Minimise risks in the use of chemicals
      - RTC4703A - Plan and implement a chemical use program
      - involvement in professional development programs comprising technical and legislative updates on an annual basis
Consistency in performance

• Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable in the work environment.

Context for assessment

• This unit of competency must be assessed in the context of a sport or recreation activity. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace.

• Assessment of this unit of competency will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes.

• Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
RTC3805A Coordinate work site activities

Unit Descriptor

This competency standard covers the process of coordinating work site activities for small-scale projects. Responsibility may be for the basic direction and coordination of small groups working on a site remote from the main enterprise, small projects or parts of projects, or small areas within the enterprise. The coordination of work site activities is likely to be under limited supervision with checking only related to overall progress. Work site coordination requires the application of extensive agricultural, horticultural and/or conservation and land management knowledge, and a broad range of relevant skills. The work is usually done within routines, methods and procedures where some discretion and judgement is required in the selection of equipment, work organisation, services, actions, and achieving outcomes within time constraints.

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare for work site activities

1.1 Requirements of the work are clarified with supervisor of the project.

1.2 Personnel, equipment and material resource requirements are identified according to the scope of the project and supervisors instructions.

1.3 The order of activities and time allocation is identified, documented and presented to the supervisor for verification.

1.4 The environmental implications of the proposed work site activities are identified and the likely outcomes assessed and reported to the supervisor.

1.5 OHS hazards are identified, risks assessed and reported to the supervisor.

1.6 Personal protective equipment (PPE) is selected, used, maintained and stored according to the type of work site activities to be undertaken.

2. Organise resources

2.1 Materials are purchased and equipment/machinery is hired as authorised by the supervisor and according to enterprise guidelines.

2.2 External agency permits are gained in the correct order as necessary.

2.3 Neighbours and affected parties are notified of works to be undertaken as necessary.

2.4 Delivery of materials and equipment/machinery to site is organised according to documented order of activities.

2.5 Personnel are organised to be on site when they are required.
3. Coordinate and report on activities

3.1 All resources are coordinated and timed to suit the scope of the project and order of activities.
3.2 Personnel are directed in activities for each period of work.
3.3 Personnel, activities, timelines and resource usage are monitored and documented according to enterprise guidelines.
3.4 Contingency situations are recognised and reported to the supervisor, and corrective actions taken according to enterprise guidelines.
3.5 A simple project report is written to inform management of work site activities undertaken and completed.

KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information may need to be communicated with the supervisor as work site activities progress.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information on personnel and resource requirements may need to be collected, analysed and organised according to the scope of the project to be coordinated.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Activities may need to be planned and organised to ensure that the needs of management are met and that the site activities are completed on time.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Team work may be applied to ensure that all site works are completed successfully.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical ideas and techniques may be applied when organising time frames for each activity in the project.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Site contingencies, personnel difficulties, timeline failures, and assessing hazards and identifying controls may require problem-solving skills.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be used to communicate and record progress of work site activities.</td>
<td>2</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the range of contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment may depend on the work contexts.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

What might be included in work site activities?

Work site activities may be part of small or short-term projects or be part of larger projects.

What material, equipment/machinery and personnel resource requirements are likely to be identified?

Materials may include goods that will be consumed by the project such as fertilisers, plants, stakes and mulch in a planting program. Equipment and machinery may include hand tools, tractors, vehicles, watering equipment and personal protective equipment. Personnel may include those obtained from within an enterprise, staff "borrowed" from another enterprise, hired from a contracting firm, or hired for the project from outside the industry.

What might be the environmental implications of proposed work site activities?

- Environmental implications may include threats to flora and fauna; risk of contamination of soils, water or adjoining property through fertilisers and chemicals flowing into drains and water sources. Land used for a planting program for example may include chemical residues in the soil, spray drift, contaminated run-off water, run off from over-watering, diseased plant material, waste plant material, and physical damage such as soil compaction from machinery.
- Where new sites are established the interruption of native corridors and degradation of the ecosystem edge may compromise existing native ecosystems.
- If the project involves construction activities, this may impact on the environment due to excess noise, dust or water.
- Compliance with local, State/Territory, and Commonwealth environmental legislation may be required if removing trees for example.
- Legislation may address management requirements for water, natural heritage, vegetation clearance and waste.

What OHS hazards may apply to work site activities?

Hazards may include disturbance of services, solar radiation, dust, noise, through traffic, uneven surfaces and holes, moving machinery and machinery parts, powered equipment and hand tools, confined spaces, hazards from use of hired equipment (untrained staff), and overhead hazards including powerlines.

What PPE is likely to be selected?

PPE will be determined by the type of activity being undertaken and may include work boots, gloves, overalls, sun hat and sunscreen lotion, safety harness, hard hat, hearing or eye protection, respirator or face mask.
Where might the materials be available from?

Materials to be consumed by the activity may be available through the enterprise as a stockpile or stored goods, or it may be purchased for the job. Materials are often available through supply companies. The enterprise may have purchasing policies and procedures and existing accounts with some suppliers.

Where might equipment/machinery be sourced?

Equipment and machinery to be used for the activity may be available through the enterprise, or hired or "borrowed" for the job. There are many commercial places that hire machinery on a daily charge out rate, or some enterprises may lend specialist equipment or machinery as part of a reciprocating arrangement.

What type of activities may require external agency permits?

Some typical activities that may need a permit include: pruning or removal of large trees, connecting to water systems, application and disposal of chemicals and polluted waters, operating specialised machinery (e.g., chainsaws, skid steer loaders, forklifts), working outside normal hours, setting up traffic and pedestrian barriers and digging near services (phone, gas, power, water, sewerage and drains).

What situations may require neighbours and affected parties to be notified?

Neighbours may need to be notified if the activities involve high levels of noise, dust or chemical use. Often the local council requires notices to be sent out in advance of such work.

Why would activities etc be documented?

Documentation of work site activity may allow you to determine if the work is on track, provide progress reports to supervisors, and plan for delivery and storage of materials and hiring of equipment to minimise costs and time wasting for the enterprise.

What might be considered contingency situations?

Contingency situations may include the delay in delivery and/or breakdowns with equipment and machinery, poor weather conditions, poor quality materials and unforseen soil problems. A coordinator of work site activities may need to be prepared for such situations and provide other work on the project until the problem is fixed, provide other work away from the site, or delay the project if possible.

What might be included in a simple project report?

A project report may include the project name, authors name and date, project description, progress of activities, major issues, OHS issues, expenditure and any future activities that may need to be planned.
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in coordinating work site activities construction works requires evidence that a person can prepare and plan for activities, organise all resources required, and monitor and report on activities undertaken. The skills and knowledge required to coordinate work site activities must be transferable to a different work environment. For example, this could include different projects, workplaces and labour force situations.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Environmental awareness associated with undertaking project works to ensure the impact on the environment is minimal.
- Work schedule programming.
- Hiring and subcontracting of labour.
- Possible causes of disruption to work activities and their effect on quality and time schedules.
- Responsibilities and requirements for obtaining external agency permits as necessary.
- The range, use and availability of materials, equipment and machinery that may be required for the project.
- OHS issues, legislative requirements and Codes of Practice.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Read and interpret documentation associated with work site activities.
- Calculate material and resource requirements.
- Coordinate a team to achieve optimum performance.
- Communicate with personnel at all levels.
- Document results clearly and concisely.
- Perform an OHS risk assessment.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
**RTC4024A**

**Unit Descriptor**

Recommend plants and cultural practices

This competency standard covers the process of providing recommendations on plants and their cultural requirements for specific situations and uses. Recommending plants is likely to be undertaken without supervision. Responsibility for and organisation of the work of others involved in providing information on plants may be required. Recommending plants requires knowledge of principles and practices of plant establishment and maintenance, plant nomenclature, botanical features of plants, plant physiology, soil characteristics, customer service and communication skills.

**Unit Sector**

Horticulture

<table>
<thead>
<tr>
<th>ELEMENT PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ELEMENT</strong></td>
</tr>
<tr>
<td>1. Identify client preferences and requirements</td>
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<tr>
<td></td>
</tr>
<tr>
<td>2. Select plants to suit specific situations</td>
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<td>3. Advise on plants for specific situations</td>
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### KEY COMPETENCIES

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Information about recommendations should be communicated with the client and manager orally and in writing. There is likely to be negotiation with the client to achieve outcomes that satisfy client preferences and requirements and enterprise policy</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information about plants will need to be researched. Information addressing the specific preferences and requirements of the client should be interpreted and applied in the light of research to structured recommendations</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Customer service, identification of preferences and requirements, information research and recommendations should proceed in an orderly and efficient manner, timely and appropriate information needs to be available for decision-making, the recommendation should meet client needs and offer alternatives where necessary</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Recommending plants to clients may require coordination and consultation with team members to deliver effective and accurate recommendations to the client's satisfaction</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical application will be required to calculate area, quantities, plant unit costs and recommended planting areas</td>
<td>3</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problem-solving techniques will be required to satisfy the client's preferences and requirements. Inadequate knowledge in an area of client query and unavailability of plants within the specific enterprise to meet client need will also require problem-solving technique</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology will be required to record, store and communicate ideas and information, it will be used to research, collate and analyse relevant information to produce recommendations</td>
<td>3</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

Clients may include
- retail customers
- commercial clients
- staff members
- community groups
- industry counterparts

Cultural factors may include
- the growth stage at which the plant is purchased
- growth media and plant monitoring
- weed, pest and disease control
- irrigation and scheduling
- drainage
- application of nutrients
- growth media management
- canopy management

Principles will vary according to the environment and situation and may include
- horticultural principles
- botanical principles
- conservation principles
- land management principles
Environmental factors may include

- controlled environments
- a field, nursery, indoor or aquatic growth environment
- humidity
- aspect
- mean temperatures
- artificial light
- season
- day length
- water availability
- quality and form delivery to plants, eg, sprinklers, spray jets, drip
- growth media, eg, field soil, container soil, artificial soil or hydroponic media
- growth media type, quality and specific features or limitations
  - rock
  - clay
  - loam
  - sandy types soils
  - acidity or salinity
  - indoor container volume and drainage aspects

Botanical names may include

- family
- sub-family
- genus
- species
- cultivar of recommended plants

Common names

- may vary nationally and internationally
- should be provided in the context of the area in which the plant is grown or originates and in the company of the botanical name of the plant

identical common names may refer to

- different plants, nationally and internationally

Plants may include

- trees
- shrubs
- groundcovers
- turf
- herbaceous
- indoor
- bedding
- lilies
- grasses
- aquatic species
- cultivars
Growth and performance characteristics may include:
- rate of growth
- growth habit
- form
- lifespan
- reproduction
- seasonal and growth stage influences on flowering, cropping, foliage and presentation
- susceptibility to weeds, pests and diseases
- form flexibility
- pruning requirements or advantages
- responsiveness to cultural, environmental and climatic conditions

Researched and experiential awareness knowledge of plants and their growth and performance characteristics may be increased through consultation with:
- team members
- the manager
- own knowledge
- specific literature
- supplier specifications
- catalogues
- local historical performance data
- industry best practice guidelines

resources may include:
- enterprise or public library
- business and research organisation websites
- industry consultants
- community groups
- suppliers and contractors
- enterprise manager and team colleague experience
- experts in the local area or industry sector

Cultural and maintenance requirements may include establishment or after-care requirements for:
- pruning
- staking
- irrigation
- drainage
- weed
- pest and disease control
- nutrition
- shade
- shelter
- soil treatments
Purchase options and availability may include:
- options in plant stage of growth
- presentation of plants
- unit quantities in which plants are available and subsequent pricing, deliver times and methods of payment

where plants are not available from the enterprise, arrangement and pricing schedules may be in place to obtain the plants through an alternative enterprise.

The sport and recreation industry covers:
- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself
EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered

- Assessment must confirm sufficient knowledge in providing recommendations on plants and their cultural requirements for specific situations and uses
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's work environment
- In particular, assessment must confirm the ability to
  - accurately identify the specific situation for which plants are required
  - identify and select plants that will meet identified needs
  - use confident and advanced communication skills to recommend the plants in a manner that is readily understood by the client
  - transfer the skills and knowledge required to recommend plants to a different work environment, eg, This could include different clients and requirements, regions, plant types and reasons for planting

Interdependent assessment of units

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - competencies relevant to the job function
Required knowledge and skills

• Required knowledge
  • Principles and practices for the establishment and maintenance of plants recommended by the enterprise
  • Nomenclature to plant family, genus, species and cultivar for the range of plants recommended by the enterprise
  • Botanical features of plant species and/or cultivars relevant to the industry region
  • Practical understanding of the physiology of the range of plants supplied and recommended by the enterprise and their comparative growth and performance characteristics in response to different cultural and environmental factors
  • Soil characteristics, particularly in relation to the geographical and climatic region from which clients generally originate
  • Responsibilities and liabilities in respect to the provision of recommendations and customer service under the Trade Practice laws
  • Enterprise customer service policy and procedures
  • Problem-solving techniques
  • Innovation and recent practices in plant selection, use and performance relevant to the region
  • Customer service and communication skills

• Required skills
  • Communicate and negotiate orally and in writing with the client, staff, managers, suppliers and consultants
  • Conduct literature and industry research, collate and analyse findings on plant species and cultivars, their characteristics and requirements
  • Record all relevant information according to enterprise and industry standards
  • Comply with legislative requirements
  • Explain to the client Occupational Health and Safety requirements or basic safety precautions relevant to the establishment and on-going maintenance of plants
  • Comply with Occupational Health and Safety requirements of the workplace
  • Calculate plant costs, supply volumes and rates of planting

Resource implications

• Physical resources - this unit of competency requires access to appropriate documentation and resources normally used in the workplace

• Human resources - assessment of this competency will require human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
  • be competent in this unit
  • be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
  • have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A
Consistency in performance

- Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable to the work environment.

Context for assessment

- This unit of competency must be assessed in the context of a sport or recreation activity. For valid and reliable assessment, the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace.
- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes.
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
RTC4206A Supervise landscape project works

Unit Descriptor

This competency standard covers the process of supervising landscape project works across a range of situations and environments including amenity and natural resource areas. Such project works may include a planting program, construction of landscape features such as structures, paving, installation of drainage or irrigation, building retaining walls, land shaping and stabilising or a combination of these. Work is likely to be under limited supervision with only general guidance on progress sought by management and/or the client. Responsibility for the work of others may be required. The supervision of landscape project works requires a broad range of skills and knowledge and an ability to coordinate and monitor activities efficiently and effectively.

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Identify scope of landscape project works

1.1 Nature of landscape project works and extent of responsibilities are identified and checked against relevant landscape documentation.

1.2 Personnel and other resources required to undertake landscape project works are identified according to the scope of the project and relevant landscape documentation.

1.3 A work program is developed according to the needs of management and/or the client to ensure that project outcomes are reached within designated time lines.

1.4 The environmental impact of the proposed landscape project works is considered.

1.5 OHS hazards are identified, risks assessed and suitable controls planned.

2. Coordinate the supply of materials/equipment

2.1 Material quantities and equipment requirements are calculated to ensure an on-going work program is maintained according to the scope of the project.

2.2 Material quantities are ordered, checked for quantity and quality, then stockpiled according to enterprise guidelines.

2.3 Any specific delivery instructions are conveyed and confirmed with suppliers to ensure materials are delivered according to the work program.

2.4 Any rejected material is sent back to supplier and re-ordered according to enterprise guidelines.

3. Monitor landscape project works

3.1 Work program is monitored and adjusted to ensure the site is developed according to the needs of management and/or the client, and to ensure that project outcomes are reached within designated time lines.

3.2 Variations to the work program, issues likely to cause delays, and contingencies beyond the scope of the project are identified, recorded and reported to management and/or the client according to enterprise guidelines.

3.3 The work site is monitored to ensure it remains in a clean, tidy and safe condition throughout and on completion of landscape project works.
4. Prepare site for completion

4.1 Site is inspected prior to practical completion to ensure all works have been undertaken according to management and/or client needs and the relevant landscape documentation.

4.2 Any works not complying are noted and rectified according to enterprise guidelines.

4.3 A completed landscape project works report is produced, recorded and communicated to management and/or the client according to enterprise guidelines.

KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information may need to be communicated with management and/or the client as the landscape project works progress.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information on personnel and resource requirements may need to be collected, analysed and organised according to the scope of the project to be supervised.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Activities may need to be planned and organised to ensure that the needs of management and/or the client are met, and that the project works are completed on time.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Team work may be applied to ensure that all project works are completed successfully.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical ideas and techniques may be applied when ordering the materials required for the landscape project works.</td>
<td>3</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problem-solving skills may be applied when time delays are experienced due to inclement weather.</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be used to communicate and record progress of landscape project works.</td>
<td>3</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

What might be included in landscape project works?
Landscape project works may include a planting program, turf installation and cultivation, the erection of landscape structures and features, installation of drainage and irrigation and garden maintenance or restoration, construction of walking tracks, boardwalks and safety rails, and earthworks involving land shaping and stabilisation of slopes and embankments. Landscape project works can occur across a range of environments and may include amenity and/or natural areas.

What landscape documentation is likely to guide the supervision of landscape project works?
Landscape documentation may include drawings, plans, specifications, contracts, bill of quantities and quotations, reports and computations.

What might be considered an environmental impact in relation to proposed landscape project works?
Any landscape project works may impact on the environment in either a positive or negative manner. If it involves drainage and irrigation, this may reduce excess water, nutrient and chemical flow into natural waterways. If the works involve excavation, then this may damage the soil structure and stability of the site, damage remnant vegetation and affect water flow.

What OHS hazards may apply to landscape project works?
Hazards may include disturbance of services, solar radiation, dust, noise, through traffic, uneven surfaces, overhead and underground services, holes, moving machinery and machinery parts, powered equipment and hand tools.

What suitable controls are likely to be implemented?
Suitable controls should be in line with enterprise guidelines and may include cleaning and storing of materials and equipment, appropriate use, maintenance and storage of personal protective equipment such as sun, noise and dust protection, safe operation of machinery and equipment, correct manual handling, appropriate use of safety equipment such as signage and protective barriers, and basic first aid services on site.

What issues likely to cause delays and contingencies beyond the scope of the project are likely to be identified?
Delays/contingencies to the project may include industrial disputes, inclement weather, site access, labour/material shortages, and equipment breakdowns.
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in supervising landscape works requires evidence that the work can be scheduled, supplies of materials and equipment can be coordinated, the landscape works can be monitored, and the site can be prepared for hand over. The skills and knowledge required to supervise landscape works must be transferable to a different work environment. For example, this could include different landscape projects, teams of workers, environments and landscape features.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Environmental awareness associated with undertaking landscape project works to ensure the impact on the environment is minimal.
- Project contracts, documentation, plans and specifications.
- Possible causes of disruption to work programs and their effect on quality and time schedules.
- Site assessment and work site establishment.
- Supervision of labour and sub-contractors.
- Job reporting including format, frequency and documentation.
- Issuing of instructions, variations and RFI.
- Legislative requirements and legal responsibilities (including OHS).
- OHS responsibilities of employers and employees.
- Hazard identification, assessment and control.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Read and interpret the associated documentation for landscape projects.
- Calculate material and resource requirements.
- Coordinate a team to achieve optimum performance.
- Communicate with personnel at all levels.
- Document results clearly and concisely.
- Demonstrate safe working practices.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTC4306A Supervise maintenance of machinery and equipment

Unit Descriptor
This competency standard covers the functions involved in supervising the maintenance of property, machinery and equipment. It requires the application of skills and knowledge to develop and implement a maintenance plan which is cost efficient, and causes minimal disruption to enterprise operations. It involves determining and scheduling staff and resources and maintaining relevant legislative requirements, safe workplace and positive environmental practices. The work functions in this standard are likely to be carried out independently within enterprise guidelines.

Unit Sector Horticulture

ELEMENT PERFORMANCE CRITERIA

1. Prepare maintenance plan
   1.1 Maintenance requirements for property, machinery and equipment are identified from relevant information sources
   1.2 Maintenance costs are identified and quantified
   1.3 Maintenance requirements are checked against warranty, insurance agreements and indemnity provisions
   1.4 Maintenance plan is developed to promote and sustain performance and production systems in line with enterprise requirements
   1.5 Effective workplace communication strategies are established with regard to maintenance plan, environmental and Occupational Health and Safety policies, and enterprise requirements

2. Implement maintenance plan
   2.1 Resource and supply requirements are identified, secured and included in enterprise budgets and operational considerations
   2.2 Prepared maintenance schedules and procedures are effectively communicated to staff, contractors and suppliers to minimise negative impacts on production and costs
   2.3 Maintenance plan is implemented and scheduled to minimise disruption to enterprise operations
   2.4 Potential risks are assessed with regard to staff and supply problems, and contingency plans prepared accordingly
   2.5 Machinery and equipment are operated to manufacturers specifications, Occupational Health and Safety and enterprise requirements

3. Monitor maintenance plan
   3.1 Maintenance activities and performance are monitored against maintenance plan for efficiency and effectiveness
   3.2 Workplace hazards and environmental implications associated with maintenance procedures are monitored and controlled in line with Occupational Health and Safety and enterprise requirements
   3.3 Costs are monitored and controlled within enterprise budget requirements
   3.4 Relevant information with regard to the maintenance plan is documented in accordance with enterprise requirements
   3.5 Property, machinery and equipment are maintained in clean and safe operational conditions
KEY COMPETENCIES

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>With regard to maintenance requirements and costings may be discussed with staff, contractors and suppliers</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>With regard to the performance and outcomes of maintenance activities may be documented and organised by records</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Maintenance activities may be planned and coordinated with staff around enterprise operations</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Team work may be applied in the coordination of methods and procedures to monitor and conduct maintenance activities to achieve maintenance plan</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>May be applied to estimate and calculate maintenance and repair costings within budgetary guidelines</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems of staff, resources or supply may be planned for and prepared in a contingency plan to minimise disruption to work schedules</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>To access information, communicate, monitor, measure and record information with regard to maintenance activities and performance</td>
<td>1</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

Factors necessitating the requirement for maintenance procedures include
- wear
- corrosion
- design problems
- equipment modifications
- incorrect use and accidents
- acts of nature
Information sources may include

- operational diaries
- staff comment and/or personal testing
- observation of structures
- machinery and equipment
- manufacturers in-service updates
- operator's manuals
- property improvement groups
- relevant government departments
- other enterprise operators, contractors and service representatives

Maintenance plans may include

- maintenance activities and schedules
- maintenance costs and budget details
- staff
- resource and supply requirements
- staff roles and responsibilities
- contingency plan for staff and supply problems
- reporting requirements
- environmental impact control measures

Enterprise requirements may include

- Standard Operating Procedures (SOP)
- industry standards
- production schedules
- Material Safety Data Sheets (MSDS)
- legislative and licensing requirements
- work notes
- product labels
- manufacturers specifications
- operator's manuals
- enterprise policies and procedures including
  - waste disposal
  - recycling
  - re-use guidelines
  - Occupational Health and Safety procedures

Environmental impacts resulting from

- excessive noise and exhaust emissions
- damage to native vegetation and animals
- the unsafe use and disposal of maintenance debris, eg, oil containers, chemical residues
- hazardous substances, eg, fuels, oils
- it may also include
  - dust problems
  - soil disturbances and increased run-off flows from machinery use and unsafe cleaning and servicing activities
Occupational Health and Safety requirements may include

- systems and procedures for the safe maintenance of property, machinery and equipment including hydraulics and exposed moving parts
- hazard and risk assessment of workplace and maintenance activities and control measures
- safe lifting, carrying and handling techniques including
  - manual handling
  - the handling and storage of hazardous substances
- the appropriate use, maintenance and storage of personal protective clothing and equipment which may include
  - overalls
  - gloves
  - eye and hearing protection
  - respirator or face mask and boots
- safe systems and procedures for outdoor work including
  - protection from solar radiation
  - fall protection
  - confined space entry
  - the protection of people in the workplace
  - the appropriate workplace provision of first aid kits and fire extinguishers

Resource and supply provisions may include

- machinery, equipment and materials including welders, eg, arc, gas and MIG
- lathes
- bench presses
- multimeters and ohm meters
- inspection pits
- lifting and support equipment, eg, jacks, overhead gantry, blocks
- power tools, eg, grinders, drills
- hand tools, eg, spanners, hammers, screw drivers
- workshop storage requirements may include
  - racks for commonly used steel angle
  - rods
  - tube metal
  - wire
  - racks or boards for orderly placement of tools
Hazards

that may be encountered in the workplace may include

- exposure to loud noise and fumes
- solar radiation
- dust
- mechanical vibration, and hazardous substances, eg, fuels, oils
- hazardous atmosphere
- oil and grease spills
- the presence of bystanders
- livestock and wildlife in the workplace
- adverse weather conditions
- electricity
- powerlines
- mechanical malfunctions and other machinery including hydraulics and exposed moving parts

Relevant information

may include

- maintenance performance
- costs
- problems
- priorities
- solutions
- schedules and completed work

The sport and recreation industry
covers

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself
EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

**Critical aspects of evidence to be considered**

- Assessment must confirm sufficient knowledge required to develop and implement a maintenance plan which is cost effective, and causes minimal disruption to enterprise operations
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's work environment
- In particular, assessment must confirm the ability to
  - to supervise maintenance covering all components of planning, costing and scheduling
  - determine planning priorities and maintain schedules
  - overseeing costs within budgets
  - determine staff roles and supervise a maintenance team
  - apply estimations and calculations with regard to time and cost of repairs
  - replacement and servicing procedures
  - recommend alternative strategies in the event of staff or supply problems

**Interdependent assessment of units**

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Nil
Required knowledge and skills

• Required knowledge
  • Types of maintenance requirements with regard to property, machinery and equipment
  • Maintenance and servicing cycles for property, machinery and equipment
  • Relevant State/Territory legislation, regulations and Codes of Practice with regard to workplace Occupational Health and Safety and environmental protection requirements, and the use and control of hazardous substances
  • Hazards and risks and respective control measures
  • Training and instruction techniques for directing the learning of staff

• Required skills
  • Plan, cost and schedule maintenance requirements
  • Establish and monitor performance targets for maintenance team
  • Maintain accurate record and report keeping procedures
  • Monitor and access performance of maintenance activities
  • Interpret maintenance requirements from information sources
  • Observe the emergence and supervise the removal of workplace hazards and risks
  • Document plans and write reports
  • Estimate and calculate resource requirements, machinery and servicing costing

Resource implications

• Physical resources - assessment of this competency requires access to
  • appropriate documentation and resources normally used in the workplace

• Human resources - assessment of this competency will require human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
  • be competent in this unit
  • be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
  • have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A

Consistency in performance

• Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable in the work environment
Context for assessment

- This unit of competency must be assessed in the context of a sport or recreation activity. For valid and reliable assessment, the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances, and equipment likely to be encountered in a real workplace.
- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills, and consideration of required attitudes.
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients, or other appropriate persons.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
## RTC4701A Implement and monitor the enterprise OHS program

### Unit Descriptor
This competency standard covers the process of implementing and monitoring the enterprise OHS program. It requires the ability to provide information to the work group about OHS, facilitate the participation of workers, implement and monitor enterprise procedures for identifying hazards and assessing and controlling risks, dealing with emergencies and hazardous events, and maintain occupational health and safety records. Implementing and monitoring the enterprise OHS program requires knowledge of hazards in the workplace, relevant OHS legislation and Codes of Practice, risk control measures, hierarchy of risk control, and relevant enterprise management systems and procedures.

### Unit Sector
No Sector Assigned

### ELEMENT PERFORMANCE CRITERIA

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Provide information about occupational health and safety | 1.1 Relevant provisions of OHS legislation and Codes of Practice are accurately and clearly explained to the work group.  
1.2 Information on enterprise OHS policies, procedures and programs is provided in a readily accessible manner, and is accurately and clearly explained to the work group.  
1.3 Information about identified hazards and the outcomes of risk assessment and control procedures is regularly provided, and is accurately and clearly explained to the work group. |
| 2. Facilitate the participation of workers in OHS observance and decision-making | 2.1 Enterprise procedures for consultation over OHS issues are implemented and monitored to ensure that all members of the work group have the opportunity to contribute.  
2.2 Procedures whereby workers report OHS hazards, risks are assessed and action taken to control risks, are clearly described to the work group.  
2.3 Issues raised through consultation are dealt with and resolved promptly, or referred to the appropriate personnel for resolution in accordance with workplace procedures for issue resolution.  
2.4 The outcomes of consultation over OHS issues are promptly communicated to the work group. |
| 3. Implement and monitor enterprise procedures for identifying hazards and assessing and controlling risks | 3.1 Existing and potential hazards which are identified are reported so that adequate risk assessment and effective control measures are implemented.  
3.2 Work procedures to control OHS risks are implemented by the work group and regular monitoring occurs to ensure ongoing adherence and effectiveness of risk control.  
3.3 Inadequacies in existing risk control measures are identified in accordance with the hierarchy of control, and reported to designated personnel/management.  
3.4 Inadequacies in allocation of resources to ensure safe work practice are identified and reported to management.  
3.5 Existing risk control measures are monitored and results reported regularly in accordance with workplace procedures. |
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</table>
| 4. Implement workplace procedures for dealing with emergencies and hazardous events | 4.1 Workplace procedures for dealing with OHS emergencies are implemented where necessary to ensure that prompt and **effective control** action is taken.  
4.2 OHS emergencies are **reported** in accordance with established enterprise procedures.  
4.3 Control measures to prevent recurrence and minimise risk of emergencies and hazardous events are implemented based on the hierarchy of control, or alternatively, referred to designated personnel for implementation. |
| 5. Implement and monitor enterprise procedures for providing OHS training | 5.1 OHS induction and training needs are identified accurately, specifying the gaps between OHS competencies required and those held by the work group.  
5.2 Arrangements are made for meeting identified OHS training needs in both on and off-the-job training programs in consultation with relevant parties. |
| 6. Implement and monitor enterprise procedures for maintaining occupational health and safety records | 6.1 OHS records for work area are accurately and legibly completed in accordance with workplace requirements for OHS records, and legal requirements for the maintenance of records of occupational hazards, risk control, injury and disease events.  
6.2 Aggregate information from OHS records is used to identify hazards and monitor risk control procedures within work area according to enterprise procedures and within scope of responsibilities. |
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Provide regular updates on outcomes of risk assessment and control procedures.</td>
<td>2</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>With hazard audits in the workplace, implementing relevant OHS procedures, analysis of accident/incident records, and providing accessible information on enterprise OHS policies, procedures and programs.</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>By organising meetings to provide updates, and running OHS committee meetings.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>By consulting with staff on OHS implementation issues.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>By collecting and recording OHS related data/statistics.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>By determining best possible options to reduce injury risk and identify training needs.</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>By using word processor/email for communications.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

Which hazards may be relevant to this unit? Hazards in the workplace (e.g., uneven surfaces, confined spaces, heights), hazardous manual handling tasks, hazards associated with machinery, risks associated with plants and animals, risks associated with bystanders, plants, animal and the environment, levels of health and fitness, hazards for which personal protective clothing or equipment is required.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What methods to control risks may be included?</strong></td>
<td>General duty of care, requirements for maintenance and confidentiality of records of occupational injury and disease, requirements for records relating to hazardous substances in the workplace, confined space entry, fall protection, workplace inspections for hazards, personal protective equipment, provision of information and induction and training, regulations and Codes of Practice including those relating to plant, hazardous substances, manual handling, noise, issue resolution, health and safety representatives and occupational health and safety committees in the larger enterprises.</td>
</tr>
<tr>
<td><strong>What may be included to implement and monitor enterprise procedures?</strong></td>
<td>Supervision of the application of occupational health and safety principles and conformity with relevant legislation and Codes of Practice in each state, incident investigations, regular inspections, training records, accident and dangerous occurrence record analysis including the duties and responsibilities of all parties.</td>
</tr>
<tr>
<td><strong>What does hierarchy of control refer to?</strong></td>
<td>The preferred order of risk control measures.</td>
</tr>
<tr>
<td><strong>What protocols may be involved in reporting a major incident?</strong></td>
<td>Supervisor, enterprise, Workcover or appropriate authorities may establish reporting protocols.</td>
</tr>
<tr>
<td><strong>What may be included in effective control action?</strong></td>
<td>The communication of the location, incident investigations, and directions to emergency personnel.</td>
</tr>
</tbody>
</table>
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in implementing and monitoring the enterprise OHS program requires evidence that knowledge and skills has been applied in the implementation and monitoring of an enterprises OHS program as set out in the element and performance criteria of this competency standard, and according to enterprise guidelines and relevant acts. The skills and knowledge required to implement and monitor the enterprise OHS program must be transferable to a range of work environments and contexts. For example, this could include different workplaces, work teams and industry sectors.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Hazards in the workplace.
- Relevant OHS legislation and Codes of Practice.
- Risk control measures.
- The hierarchy of OHS risk control and its implementation for hazards in land-based industries.
- Literacy levels and communication skills of workers.
  - Suitable communication techniques.
  - Relevant enterprise management systems and procedures.
- Accident/incident investigation.
- Participative work practices.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Provide information to the work group about occupational health and safety.
- Facilitate the participation of workers in OHS observance and decision-making.
- Identify OHS hazards and controls relative to work practices and processes in work area.
- Respond to OHS hazard identification in an appropriate and timely manner.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTC4702A Minimise risks in the use of chemicals

Unit Descriptor
This competency standard covers the processes of developing, implementing and monitoring a risk control strategy in a workplace where chemicals are being handled and used. It requires knowledge of legislation and regulations surrounding chemical use, the ability to develop and implement procedures to ensure minimum risk to users, the environment and the produce, and the ability to carry out a risk assessment.

Unit Sector
Horticulture

ELEMENT PERFORMANCE CRITERIA

1. Identify hazards involved in chemical use
   1.1 External guidelines and legislation concerning chemical use are identified and sourced from relevant authorities
   1.2 Hazards involved in handling and application of chemicals are identified

2. Assess risk and develop control procedures
   2.1 Risks associated with chemical use are assessed
   2.2 Risk control measures including Emergency action plans are developed and implemented
   2.3 Industry requirements for chemicals are identified
   2.4 Withholding periods are identified and observed
   2.5 Control procedures for transport, storage and handling of chemicals are developed
   2.6 Continuous improvement strategy is implemented to minimise risk

3. Implement and monitor procedures to ensure correct and safe use and application of chemicals
   3.1 Appropriate personal protective equipment is provided for people in the workplace handling chemicals
   3.2 Procedures are implemented to ensure suitable application equipment is selected and used
   3.3 Restrictions on use of chemicals due to weather or unsuitable workplace activities are implemented
   3.4 Procedures covering chemical application rates are implemented and monitored
   3.5 Procedures for decontamination and disposal of chemicals and their containers are implemented and monitored
   3.6 Adherence to risk control procedures by people in workplace is monitored

4. Record risk assessments
   4.1 Record keeping system is developed as required by labels, industry, legislation and authorities

5. Evaluate risk control measures
   5.1 Procedures for evaluating the effectiveness of risk control measures are developed
   5.2 Shortcomings in existing risk control measures are identified and rectified
KEY COMPETENCIES

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<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>From a range of sources concerning chemical use will be communicated to others</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>On risks involved with chemical use will be collected and analysed to develop risk control measures</td>
<td>2</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>To handle and use chemicals will have to incorporate workplace activities and their planning</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Team work may be involved in implementing and monitoring procedures</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Interpreting Maximum Residue Limits will involved mathematical techniques</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Assessing comparative risks associated with a variety of chemicals will involve problem solving</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>May be involved in developing and implementing procedures and monitoring outcomes</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

External guidelines and legislation may include:
- Quality Assurance systems or Codes of Practice
- Legislation may include Pesticide Acts
- Occupational Health and Safety Acts regarding hazardous substances and application equipment
- Dangerous Goods Act
- Poisons Act or Protection of the Environment Acts
Chemicals involved may include

- insecticides
- fungicides
- herbicides
- bactericides
- algaeicides
- biologicals
- nematicides
- rodenticides
- antimicrobial agents
- anthelmintics
- fumigants
- hormone growth promotants or a range of veterinary chemicals used to treat animals for disease

Hazards will be listed on

- labels and the Material Safety Data Sheets (MSDS) for the chemical concerned and may include
  - flammability
  - toxicity
  - health hazards
  - damage to non-target organisms
  - environmental damage or residues in foods

Risks to the environment may include

- pollution of ground or surface waters
- damage to habitats
- damage to off-target organisms
- damage to community amenity due to spray drift
- risks associated with the produce include
  - chemical residue in plant produce, livestock or water
- risks associated with Occupational Health and Safety include exposure to chemicals during handling and application, and public health risks
- other risks include lack of appropriate insurance coverage

Emergencies may include

- spills
- fire
- explosion or poisoning

Withholding periods may include

- export slaughter interval or withholding period
Risk control procedures may include:
- provision of adequate personal protective equipment
- storage facilities that are suitable to be chemical
- implementing buffer zones and other sensitive site strategies
- erecting bunding
- sufficient training in transporting, handling and storing chemicals

Personal protective equipment may include:
- chemical resistant gloves
- boots
- overalls
- breathing apparatus
- goggles
- face shields or hats

Application equipment may include:
- knapsacks or hand held pneumatic sprayers
- drench guns
- spot on applicators
- Controlled Droplet Application (CDA) and air assisted units
- self-propelled sprayers
- controllers or power operated equipment like
  - boomsprays
  - pressure wands
  - jetting race
  - shower/plunge dips
  - hand jetting or air blast sprayer

Procedures for evaluating may include:
- analysing records to evaluate effectiveness of risk control measures
The sport and recreation industry covers

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered

- Assessment must confirm sufficient knowledge to minimise risks associated with chemical spills,
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's work environment
- In particular, assessment must confirm the ability to
  - transfer these skills to other work contexts
  - ensuring that damage to environment and others is minimal
  - that safety precautions and regulations are followed at all times
  - observe that the area is cleaned according to prescribed requirements

Interdependent assessment of units

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction with the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Nil
Required knowledge and skills

- **Required knowledge**
  - Sources of information on chemicals, including labels, regulations, and Material Safety Data Sheets
  - Relevant industry standards, Codes of Practice, State and Territory legislation and regulations governing application, transport, handling and storage of chemicals
  - Occupational Health and Safety legislative requirements and Codes of Practice
  - Insurances required for chemical use, transport and storage
  - Correct wearing/fit of personal protective equipment

- **Required skills**
  - Read and interpret all appropriate relevant chemical related documents
  - Communicate procedures to others
  - Manage chemical use to comply with industry standards

Resource implications

- **Physical resources** - assessment of this competency requires access to
  - appropriate documentation and resources normally used in the workplace

- **Human resources** - assessment of this competency will require
  - human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
    - be competent in this unit
    - be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
    - have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A

  where this competency standard is being used as part of an accreditation or licence for purchase or use of chemicals, the assessor must meet the requirements of the issuing body

  this may include
  - accreditation with that issuing body
  - maintenance of current competency in this competency standard
  - involvement with professional development programs comprising technical and legislative updates on an annual basis

Consistency in performance

- Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable in the work environment
Context for assessment

- This unit of competency must be assessed in the context of sport or recreation activity. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace.
- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes.
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
RTC4703A Plan and implement a chemical use program

This competency standard covers the process of planning and implementing a program for the use of chemicals in a workplace. It involves using chemicals as well as supervising others in the use of chemicals concerned, and the ability to modify application requirements as needed. It involves decision making in regards to the risk control measures to be applied when using chemicals in different situations, monitoring safety procedures, and ensuring that others are trained sufficiently in the use of the chemical concerned. It involves the selection and management of chemical application systems.

Unit Sector Horticulture

ELEMENT PERFORMANCE CRITERIA

1. Identify the requirements of chemical use
   1.1 Chemical use requirements relevant to the workplace are accessed and interpreted
   1.2 Legislation and safety procedures surrounding the use of chemicals are accessed and interpreted
   1.3 Personal Protective Equipment is used and provided for others for transport, storage and application of chemicals
   1.4 Industry standards for chemical use are identified
   1.5 Appropriate insurance policy cover is confirmed or arranged

2. Monitor the implementation of safety requirements
   2.1 Implementation of safety practices and rules by others is monitored
   2.2 Safety incidents are investigated and reported in accordance with directions, standards and legislative requirements
   2.3 Safety hazards in the transport, storage and application of the chemicals are identified
   2.4 Risk control measures to minimise risk involved in chemical use
   2.5 Measures for controlling residue in the environment and produce are implemented

3. Plan and implement a maintenance program for chemical use equipment
   3.1 Plan for maintenance of application and personal protective equipment is established according to manufacturers instructions
   3.2 Implementation of maintenance plan is supervised
   3.3 Faulty or damaged equipment is identified and repaired or replaced

4. Determine the suitability of a chemical for use in a control program
   4.1 Integrated Pest Management (IPM) or Animal Health Strategy (AHS) is planned
   4.2 Chemicals included in the Integrated Pest Management or Animal Health Strategy are selected according to situation
   4.3 Alternatives to chemical treatments are considered and applied according to Integrated Pest Management or Animal Health Strategy
5. Ensure the correct selection and application of the chemical

5.1 Chemicals suitable for situation are identified, and procedures for preparation, application and risk control are read and interpreted

5.2 Application equipment is selected in accordance with procedures

5.3 Ensure calibration of equipment is implemented according to directions and standards

5.4 Pre-operative checks and maintenance procedures are implemented

5.5 Meteorological conditions are assessed as appropriate to application prior to and during chemical application

5.6 Chemical application is conducted safely in accordance with hazards associated with the chemicals concerned

5.7 Chemical spills or accidents are dealt with according to procedures

6. Ensure personnel are adequately trained in chemical use

6.1 Training is provided to personnel who are handling or using chemicals

6.2 External training and assessment opportunities are organised for staff involved in using chemicals

7. Supervise clean up following chemical application

7.1 Clean up procedures are implemented following chemical applications

8. Implement recording systems for chemical storage and use

8.1 Records comply with legislation and regulations surrounding chemical use

8.2 Risk assessment and control strategies are recorded in accordance with requirements

**KEY COMPETENCIES**

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Procedures, policies and safety information are communicated to others in the workplace</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>On labels, Material Safety Data Sheets and legislation need to be interpreted and analysed</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Overall organisation management will require activities to be planned in conjunction with chemical use</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Working with others, internal and external to the organisation, requires teamwork</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Calibration and calculation of equipment and chemicals requires mathematical techniques</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Identifying hazards and potential problems that may arise during chemical use and developing suitable solutions and risk control measures</td>
<td>2</td>
</tr>
<tr>
<td>Using technology</td>
<td>May be required to record and manage chemical information</td>
<td>2</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range Statements provide advice to interpret the scope and context of this unit of competence, allowing for differences between enterprises and workplaces. The Range Statements relate to the unit as a whole and helps facilitate holistic assessment. In addition, the following variables may be present for this particular unit of competency:

**Chemicals**

may include

- insecticides
- fungicides
- herbicides
- bactericides
- algaecides
- biologicals
- nematacides
- rodenticides
- fumigants
- antimicrobial agents
- anthelmintics
- hormone growth promotants or veterinary chemicals

**Legislation and safety rules**

may include approved

- Pesticides Acts, Occupational Health and Safety Acts regarding hazardous substances and application equipment
- Dangerous Goods Act
- Poisons Act or Protection of the Environment Acts for chemical use

**Personal Protective Equipment**

may include

- boots
- overalls
- chemical resistant gloves
- aprons
- face shields
- respirators and hats

**Directions and standards**

may include

- the instructions on the chemical label
- in an operator's manual
- on Material Safety Data Sheets (MSDS)
- in an industry standard
- from and Occupational Health and Safety manual or other regulation
- a hazardous substances regulation
Hazards will be listed on

- labels and the Material Safety Data Sheets for the chemical concerned and may include
  - flammability
  - toxicity
  - health hazards
  - damage to non-target organisms
  - environmental damage
  - off target spray drift or residues in foods

Risk control measures that may be implemented include

- spillage
- fire
- contact of chemical with skin or eyes
- accidental ingestion
- incorrect concentrations in mixtures
- faulty or inappropriate storage containers
- current insurance policies
- likelihood of run-off post application
- incorrectly calibrated equipment
- spray drift
- incorrect disposal of waste chemicals or faulty equipment

Situation may include

- weeds, insects, pathogens, and vertebrate animals

Application equipment may include

- hand held knapsacks or pneumatics
- drench guns
- spot on or power operated equipment like
  - boomsprayers
  - pressure wands or air blast sprayer
  - jetting race
  - hand jetting
  - shower/plunge dips

Meteorological conditions will include

- rain
- wind
- temperature
- relative humidity
- inversion or stable air conditions

External training and assessment may include

- formal training and assessment by a Registered Training Organisation (RTO) either on or off the job, or Recognition of Prior Learning process
The sport and recreation industry covers

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statements.

Critical aspects of evidence to be considered

- Assessment must confirm sufficient knowledge to select, apply and clean up the application of a specific chemical
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's work environment
- In particular, assessment must confirm the ability to
  - supervise others working with the chemical
  - ensure that all prescribed safety directions are followed
  - monitor the implementation of the systems and procedures developed for chemical concerned
  - transfer the skills and knowledge in this standard to other work contexts

Interdependent assessment of units

- This unit must be assessed after attainment of competency in the following unit(s)
  - Nil
- This unit must be assessed in conjunction in the following unit(s)
  - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
  - Nil
Required knowledge and skills

- Required knowledge
  - Hazards involved in the use of the specific chemical concerned and related risk control measures
  - Signs of pest damage and signs of beneficial organisms
  - Life cycle of pests and target stages
  - Pet resistance to chemicals
  - Types of chemical and modes of action
  - Maximum residue limits
  - Occupational Health and Safety legislative requirements and Codes of Practice relevant to chemical use and hazardous substances
  - Application equipment features
  - Calibration
  - Knowledge of record keeping systems
  - Knowledge and understanding of relevant control of use Acts
  - Use, maintenance and storage of personal protective equipment
  - Correct wearing/fit of personal protective equipment
  - Correct wearing/fit of personal protective equipment
  - First aid and emergency procedures
  - Insurance required for chemical use, transportation and storage

- Required skills
  - Access, accurately read and interpret conditions and labels information for chemicals
  - Communicate critical chemical information to others and ensure understanding
  - Direct others to perform tasks
  - Identifying hazardous situations
Resource implications

- Physical resources - assessment of this competency requires access to
  - appropriate documentation and resources normally used in the workplace
- Human resources - assessment of this competency will require
  - human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
    - be competent in this unit
    - be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
    - have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A
- where this competency standard is being used as part of an accreditation or licence for purchase or use of chemicals, the assessor must meet the requirements of the issuing body
  - this may include
    - accreditation with that issuing body
    - maintenance of current competency in this competency standard
    - involvement in professional development programs comprising technical and legislative updates on an annual basis

Consistency in performance

- Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable in the work environment

Context for assessment

- This unit of competency must be assessed in the context of sport or recreation activity. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace
- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to the Assessment Guidelines. Further advice may also be sought from the relevant sector booklet.
**RTC4905A**  
**Unit Descriptor**

This competency standard covers the process of obtaining, calculating, summarising and presenting the costs of materials, equipment and labour for a project to the best financial advantage of a rural, horticultural or land management enterprise. Costing a project is likely to be undertaken without supervision with only general guidance on progress sought by managers. Costing a project requires a broad range of analytical skills and involves the application of extensive underpinning knowledge that includes pricing structures and project financial requirements.

**Unit Sector**

No Sector Assigned

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<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Obtain current prices for project resources | 1.1 Project objectives, required **work activities** and available finance are identified and interpreted according to the project plan and **enterprise guidelines**.  
1.2 **Resources** required for project works are identified according to the project plan.  
1.3 **Factors** affecting resource costs are identified using **available information**.  
1.4 **Add-on costs** are taken into consideration according to enterprise guidelines.  
1.5 Appropriate **tools and equipment** are selected and used for the calculation and documentation of project costs. |
| 2. Calculate individual itemised costs of the project | 2.1 Unit and total cost for each resource item is calculated according to enterprise guidelines.  
2.2 Total itemised resource costs are evaluated against the financial schedule for the project.  
2.3 **Adjustments** are made where required to reconcile resource costs with project schedules in strict adherence to enterprise guidelines for costing a project. |
| 3. Prepare a summary of the cost of the project | 3.1 Resource costs are collated and scheduled according to the project plan and enterprise guidelines.  
3.2 Total project costs are accurately calculated and **recorded** according to enterprise guidelines.  
3.3 **Financial summary** is collated, organised and submitted to management for approval. |
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
<td>Communicating ideas and information</td>
<td>Results of research and calculations should be communicated with the manager orally and in writing. There is likely to be negotiation between the trainee and the manager to achieve effective costing of the project.</td>
<td>1</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Pricing information will be gathered from various sources and analysed and adjusted against the project plan. Costing of the project should be organised and presented as a financial summary.</td>
<td>1</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>The costing process should proceed in an orderly and efficient manner. Timely and appropriate information needs to be available for calculation and reconciliation. Project costing should reflect the requirements of the project works.</td>
<td>1</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Costing a project may involve working with other members of a team to achieve an effectively costed project.</td>
<td>1</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical concepts will be required to calculate, reconcile and summarise project costs.</td>
<td>1</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems associated with availability of resources and pricing issues may arise during costing of the project and require the application of problem solving skills.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology will be required to record, store and communicate ideas and information. It will also be used to research relevant information, obtain and calculate data and produce a financial summary of the costs of the project.</td>
<td>1</td>
</tr>
</tbody>
</table>
**RANGE STATEMENT**

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environmental implications and variables for training and assessment, refer to the Sector Booklet.

<table>
<thead>
<tr>
<th><strong>What work activities may be relevant to project costing?</strong></th>
<th>Work activities may include activities to implement the project plan, identifying and minimising OHS and environmental hazards, and monitoring, recording and reporting the project plan.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What enterprise guidelines may be referred to when costing a project?</strong></td>
<td>Enterprise guidelines may include the business, production, marketing, financial and human resource management plans, and enterprise policies and procedures.</td>
</tr>
<tr>
<td><strong>What resources may be required for project works?</strong></td>
<td>Resources may include materials, tools, equipment and machinery, labour hours, staffing levels, technical skills and management requirements, consultant time and contracted services.</td>
</tr>
<tr>
<td><strong>What factors may affect resource costs?</strong></td>
<td>Factors may include the lead time before the project can be completed, the repair and servicing requirements of tools, equipment and machinery, hire and purchasing options, material, consultancy and service supply and pricing issues, work hours and staffing levels required, individual hourly rates, and other conditions in contractual and enterprise agreements.</td>
</tr>
<tr>
<td><strong>What sources may be consulted for available information?</strong></td>
<td>Sources may include the supervisor, enterprise records, employment agencies, State and Federal awards, individual enterprise agreements, manufacturers, repairers, suppliers, contractors and consultants, catalogues and journals, industry Codes of Practice and legal guidelines.</td>
</tr>
</tbody>
</table>
| **What add-on costs may need to be considered?** | • Labour add-on costs may include State and Federal charges and taxes, training requirements, workers compensation levies, award-based penalty rates for work done out of regular hours, work with specified substances and in specified locations, leave entitlements and public holiday implications.  
  • Resource add-on costs may include costs associated with materials quantities, ordering schedules and issues associated with urgency, imminence or duration of consultancy or contracted work to be provided. |
| **What tools and equipment may be needed to cost a project?** | Tools and equipment may include calculators, computer hardware, accounting or project management software, and telecommunication equipment. |
| **What adjustments may be made to resource costs?** | Adjustments may include identification of alternative resources, scheduling of resources and alternative resource quantities and pricing structures. |
How may resource costs be recorded?
Costs may be recorded on printed schedules, in a project report and against the project plan.

What items may be included in the financial summary?
Items may include unit and itemised costs, total project costs, reconciliation with available finance, and financial justification for the selection and scheduling of individual resource items.

EVIDENCE GUIDE
What evidence is required to demonstrate competence for this standard as a whole?
Competence in costing a project requires evidence that a person is able to obtain current prices for required resources, calculate costs and present a summary of project costs that provides for cost effective project outcomes. The skills and knowledge required to cost a project must be transferable to a different work environment, particularly where the specific costings relate to the other work environment. For example, this could include different projects, clients and industry settings.

What specific knowledge is needed to achieve the performance criteria?
Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Relevant State and Federal legislation, awards, enterprise agreements and management policies relating to labour hire and employment terms, and OHS.
- Current pricing structures and options for material supplies, services, contractors and consultants.
- Enterprise and industry standards and practices for formatting, organising and presenting financial and quantitative information.

What specific skills are needed to achieve the performance criteria?
To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Communicate and negotiate orally and in writing with staff, management, contractors, suppliers, manufacturers and consultants.
- Research and evaluate information.
- Accurately complete financial calculations, collate and organise quantitative and financial information.
- Comply with legislative requirements.
- Document financial summaries for the understanding of staff, managers and contractors.

Are there other competency standards that could be assessed with this one?
This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.
Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTC4908A Supervise work routines and staff performance

Unit Descriptor
This competency standard covers the functions associated with the coordination and direction of staff. It requires the application of skills and knowledge to provide information and guidance to personnel in the conduct of their duties, facilitate staff discussions and agreements, and provide constructive evaluation to staff members. The work functions associated with this standard would usually be undertaken independently and with minimal reporting requirements.

Unit Sector No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Communicate work roles
1.1 Roles and responsibilities of staff are clearly defined and documented.
1.2 Skills of staff are accurately identified and matched with available tasks and duties.
1.3 Requirements of jobs are clearly identified and communicated to personnel.
1.4 Information on activities are developed and provided to personnel.
1.5 OHS policy and procedures are effectively communicated and implemented.

2. Coordinate activities
2.1 Work activities are prioritised to ensure completion of outcomes in accordance with available timelines.
2.2 Work plans are developed to establish appropriate targets and objectives of activities.
2.3 Training and learning opportunities are identified and incorporated into work activities.
2.4 Supervisory and reporting responsibilities are clear and maintained in line with organisational requirements.
2.5 Enterprise environmental policy and procedures are effectively communicated and implemented.

3. Maintain effective working relations
3.1 Problems are recognised and addressed through discussion with work group.
3.2 Assistance is sought from work group members when difficulties arise in achieving allocated tasks.
3.3 Discussion and information sharing is routinely used to communicate requirements of work activities through a participative approach.
3.4 Disagreements and conflicts are managed constructively using appropriate conflict management strategies.

4. Provide feedback
4.1 Feedback is clear, constructive and provided promptly to individuals to support achievement of outcomes.
4.2 Difficult situations are identified and negotiated to achieve results in line with organisational requirements.
4.3 Team and individual performances are monitored regularly to ensure personnel are able to achieve goals.
4.4 Supervisory structures and lines of reporting are maintained in accordance with organisational requirements.
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Information with regard to work tasks, their application and completion date may be</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>communicated to staff.</td>
<td></td>
</tr>
<tr>
<td>Collecting analysing and organising</td>
<td>Information with regard to staff performance may be observed and monitored and included in feedback via staff performance appraisals.</td>
<td>3</td>
</tr>
<tr>
<td>information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Training activities may be planned and coordinated around work schedules or sequenced</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>as required.</td>
<td></td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Team work may be applied in methods and procedures to complete work tasks to achieve work plan requirements.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical techniques may be applied in the calculation of time sheets and the measurement of production outputs.</td>
<td>3</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Staffing or resource problems may require alternative options to be implemented or may be addressed through adjustments to work schedule.</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>To communicate job tasks, develop staff training programs, measure productivity, and record staff performance appraisals.</td>
<td>3</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables explains the range of contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment may depend on the work contexts.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

How might staff roles and responsibilities be defined and communicated?

Duty statements, workplans, defined areas of decision-making, job description and employment arrangements, team structures, supervision and accountability requirements, and enterprise policy compliance.
### What OHS requirements may be applicable to this standard?

- Systems and procedures for the safe operation and maintenance of machinery and equipment.
- Assessment of hazards and appropriate control measures.
- Procedures for safe lifting, carrying and manual handling.
- Safe systems and procedures for the handling and storage of hazardous substances, and grain.
- The appropriate use, maintenance and storage of personal protective clothing and equipment.
- Accident/incident investigation.
- Working at heights and confined spaces.
- Safe systems and procedures for outdoor work, basic first aid procedures.
- Personal hygiene standards.
- Protection from hazardous noise.
- Mechanical vibration.

### What training and learning opportunities might be identified for staff?

- Coaching, mentoring and/or supervision, formal and informal learning programs, internal and external training, provision of work experience and exchange opportunities, personal study and career planning and development, performance appraisals, workplace skills assessment, recognition of prior learning, and self assessment.

### What positive environmental practices associated with work activities may be implemented?

- Measures to reduce excessive noise and exhaust emissions, the safe use and disposal of hazardous substances and debris associated with machinery and equipment, effective water re-use systems and effluent disposal systems, the incorporation of organic matter into the soil, and measures to avoid soil disturbance associated with machinery operation and the protection of ground cover in holding or confined areas with high density animal activity.

### What difficult situations might arise for negotiation?

- Conflicts in priorities, resource constraints, lack of information, supplier delays, differences in opinion, interpersonal conflict, hazardous events, time constraints, and shortfalls in expected outcomes.

### What supervisory structures might be relevant to this standard?

- Coach/mentor, supervisor or manager, and work colleagues.
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence to supervise work routines and staff performance requires evidence of the ability to implement roles and responsibilities to efficiently and effectively achieve work activities within set timeframes. It involves the ability to communicate information and instructions, prioritise and schedule work activities, determine and implement training requirements, evaluate staff performance, and provide constructive feedback. Evidence must be demonstrated in providing leadership to the work team and the ability to promote and maintain effective relationships between staff.

The skills and knowledge required must be transferable to a different work environment. For example, this could include different workplaces, industries or work teams.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Enterprise personnel processes.
- Enterprise organisational structure and responsibilities.
- Techniques for building trust and relationships.
- Principles of team work and negotiation.
- Performance appraisal systems and procedures.
- Principles of time management.
- Conflict management techniques.
- Enterprise training requirements and processes.
- Relevant State/Territory legislation, regulations and Codes of Practice with regard to workplace OHS, environmental protection, and the use and control of hazardous substances and machinery and equipment.
- Hazard identification, assessment and control.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These include the ability to:

- Supervise and instruct staff to achieve work activities.
- Delegate and allocate tasks.
- Assess and evaluate staff competency.
- Identify and provide training requirements.
- Plan and monitor ongoing training needs.
- Plan timesheets and timetables to meet deadlines.
- Demonstrate effective time management.
- Demonstrate safe workplace and environmentally responsible practices.
- Solve problems (staffing, resources).
- Communicate information and instructions, provide feedback and prepare reports and performance appraisals.
- Calculate timesheets and measure productivity.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.
There is critical information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTC4911A Operate within a budget framework

Unit Descriptor
This competency standard covers the process of operating within an allocated cash flow budget in a rural, horticultural or land management setting. It requires the ability to participate in formulation of a budget, and supervise and monitor financial transactions. Operating within a budget framework requires knowledge of banking routines, record keeping systems for receipts and expenditure, cash flow analysis, and costing and forecasting mechanisms.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Participate in formulation of a cash flow budget
   1.1 Budget consultation is followed in line with enterprise policy.
   1.2 Budget variations are requested to suit enterprise needs.

2. Supervise financial transactions
   2.1 Expenditure is arranged within budget delegations.
   2.2 Transactions are recorded to meet taxation and accounting requirements according to enterprise practices.
   2.3 Actual sales and expenditure are compared to the enterprise budget. Financial reports are checked to ensure operations are within forecast limits.
   2.4 Expenditure is adjusted to meet financial targets as required.
   2.5 Actual and potential variations in budgeted income are reported to the manager according to enterprise requirements.
   2.6 Recommendations to address budget variations are developed.
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Through discussions and meetings with management and staff in budget formulation and as a result of any operating issues.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>To enable inputs into the budget formulation process, and record keeping according to procedures established by the enterprise.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>In line with enterprise procedures and policies.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Through participating in budget formulation.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>In undertaking budget calculations and financial transactions</td>
<td>3</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Through dealing with issues such as budget shortfalls or excesses.</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>Through the use of computers in operating a budget and reporting.</td>
<td>3</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this unit of competency. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

What may be included in budgets?

Budgets may include projected expenditure by item, projected income by source, cash flow budgets, budget delegations, variation and review procedures, credit and credit limits, security measures, reporting mechanisms, additional funds for particular projects, self-generated funds, fundraising requirements, project grants, funds received for winning tenders, and enterprise procedures and policies.

How may financial reports be checked?

Through comparisons between planned cash flow and actual budget cash flow, and similar statements from previous planning periods.
What types of records may be relevant to this standard?

Records may be paper or computer based, or enterprise accounting system

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in operating within a budget framework requires evidence that contributions have been made to the formulation of a budget, that an individual has operated successfully within the framework of that budget, and that required reporting complies with industry and enterprise standards and expectations. The skills and knowledge required to operate within a budget framework must be transferable to a range of work environments and contexts. For example, this could include different budgets, workplaces and reporting mechanisms.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Costing mechanisms.
- Forecasting mechanisms.
- Banking routines.
- Cash flow analyses and records.
- Recording systems.
- Records of receipts and expenditure.
- Work reports.
- Factors that impact upon the timing of sales and purchases (Taxation, GST, market conditions).

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Participate in formulation of a budget.
- Supervise financial transactions.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.
RTC5011A Collect and classify plants

Unit Descriptor
This competency standard covers the process of collecting and identifying plants using taxonomic keys. It requires the ability to prepare for plant collecting, collect plant specimens, preserve specimens and identify plant specimens. Collecting and identifying plants requires knowledge of herbarium collection techniques and ethics, botany, physical and biological habitat types, and plant nomenclature and taxonomy.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Prepare for plant collecting
   1.1 Purpose and objectives for collecting range of plants is confirmed.
   1.2 Area, location and/or habitat for collecting is defined.
   1.3 Resources to assist in plant location and identification are determined and prepared.
   1.4 Equipment required for collecting and preserving specimens is determined and prepared.
   1.5 Licences and/or permission to collect specimens are sought from landowner or managing agency.
   1.6 Range of likely operating conditions, hazards and difficult/sensitive environments are assessed for impact on collecting and preserving specimens.
   1.7 OHS hazards associated with plant collecting are identified.

2. Collect plant specimens
   2.1 Collecting ethics are observed when selecting specimens for picking.
   2.2 Relevant information about the specimen, its characteristics and occurrence is entered into a field note book and location coordinates are noted.
   2.3 Specimen collected provides adequate material for identification and preserving.
   2.4 Specimens are correctly tagged and stored for later identification.
   2.5 Appropriate OHS legislative requirements and work practices are followed.

3. Preserve specimens
   3.1 Preservation of specimen is undertaken while still fresh.
   3.2 Specimen is cleaned and prepared for preserving according to enterprise guidelines.
   3.3 Preserving of specimen carried out using either pressing or drying techniques.
   3.4 Dried specimen is mounted and labelled with accurate information from notebook.
4. Identify plant specimens

4.1 Resources are identified and accessed to assist in identification.

4.2 The **basic characteristics** of a plant are identified and **documented**.

4.3 Relevant plant key is used to identify plant.

4.4 Plant **identity** is confirmed against botanical description of species.

4.5 Plant identity is documented on label according to enterprise guidelines.

**KEY COMPETENCIES**

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information relating to plant identification can be recorded in field note books and discussed with colleagues.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>According to current recommended botanical practices and with regard to collecting ethics.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Equipment, materials and work procedures for identification will need to be sourced and arranged before collection activities.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Plant identification may involve working with other members of a team to complete the program, or working alone.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Measuring the length, regularity and period of plant identifying features will require mathematical application.</td>
<td>2</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems relating to the difficulty of identifying certain features of a plant or using a taxonomic key may arise.</td>
<td>1</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology may be applied in the identification and electronic recording of plants, research procedures and telecommunication used for the provision of information about plants to clients and customers.</td>
<td>1</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

<table>
<thead>
<tr>
<th>What range of plants may be relevant to this standard?</th>
<th>Plants may be native or introduced species including weeds.</th>
</tr>
</thead>
<tbody>
<tr>
<td>What resources may be used to identify plants?</td>
<td>Resources may include enterprise or public library, business and research organisation websites, enterprise supervisor and experienced team colleagues, published books and journals (e.g., floras), and experts in the local area or industry sector. It may also include personal or enterprise reference collection.</td>
</tr>
<tr>
<td>What equipment may be used to recognise plants?</td>
<td>Equipment may include computer assisted or manual word processors, telecommunication appliances, plant fixing materials, secateurs, folders and exercise books, hand lens, dissecting microscope, dissecting equipment, pens and pencils.</td>
</tr>
<tr>
<td>What OHS hazards can be included in this standard?</td>
<td>Hazards may include manual handling, using tools and equipment, noise, dust, solar radiation, falls and tripping, spider and insect bites.</td>
</tr>
<tr>
<td>What collecting ethics should be observed in the field?</td>
<td>Collecting ethics requires that, where necessary, no plant is collected from where it is prohibited, approval is gained from the landholder and/or permits are obtained to remove plants where required, that disruption to the site and surrounding vegetation and habitats is minimised, and that there is appropriate justification to collect less common or rare plant specimens from a site.</td>
</tr>
<tr>
<td>What may be included when documenting a plants occurrence in natural areas?</td>
<td>Height, canopy cover, dominant species and distribution of associated vegetation association and/or plant community, and habitats and preferred habitat/s in which plant grows.</td>
</tr>
<tr>
<td>Question</td>
<td>Answer</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>What relevant information will need to be entered into field note books?</td>
<td>Information that</td>
</tr>
<tr>
<td></td>
<td>• identifies the particular specimen by number, when it was collected and the collectors name.</td>
</tr>
<tr>
<td></td>
<td>• describes the plant itself such as size, life form, flower colour, bark colour and any other characteristics about the plant.</td>
</tr>
<tr>
<td></td>
<td>• outline the location of the plant specimen - this may require use of maps and recording of nearby landmarks.</td>
</tr>
<tr>
<td></td>
<td>• describes the ecological characteristics of the area including the physical habitat such as type of soil, rocks, slope, elevation, aspect, moisture, and biological habitat such as vegetation structure, plant community/vegetation association and other nearby plants.</td>
</tr>
<tr>
<td>What is regarded as adequate material when collecting?</td>
<td>Adequate material includes all the parts needed for accurate identification and can include leaves, flowers, twigs, fruit, and seeds. For small herbaceous plants, the roots and either whole stems or tops and bottoms as leaf shape, size, and arrangement may vary from top to bottom. Plant materials should be tagged with a number as they are collected.</td>
</tr>
<tr>
<td>What OHS requirements may be relevant to this standard?</td>
<td>OHS requirements may include identifying hazards, assessing risks and implementing controls, cleaning, maintaining and storing tools, equipment and machinery, appropriate use, maintenance and storage of PPE including sun protection, safe operation of tools, equipment and machinery, safe handling, use and storage of chemicals, correct manual handling, basic first aid, and safety procedures for protection of others.</td>
</tr>
<tr>
<td>What basic characteristics may be useful when identifying plants?</td>
<td>Plant characteristics may include the flower type, leaf arrangement and leaf shape. Other characteristics include flower colour, colours and/or markings, flower shape, size of the plant and its flowers and leaves, veining pattern of the leaves, texture of the leaves and stem, physical and biological habitat from where collected, number, size and shape of the reproductive parts, and any unusual features about the plant or its parts.</td>
</tr>
<tr>
<td>What nomenclature will be used to indicate a plants identity?</td>
<td>Scientific names including authorship will be used in identification of plants.</td>
</tr>
<tr>
<td>What documentation is involved in identifying plants?</td>
<td>Documentation may include a written description of the plant species including common and botanical names, visible characteristics, details of occurrence or origin, optimum growth requirements and/or a herbarium of plant samples preserved according to the requirements of the enterprise or industry sector.</td>
</tr>
</tbody>
</table>
What evidence is required to demonstrate competence for this standard as a whole?

Competence in identifying plants requires evidence that a person can collect and identify plants correctly using taxonomic keys. The skills and knowledge required to identify plants must be transferable to a different work environment. For example, this could include different types of plants, workplace settings and environments.

**What specific knowledge is needed to achieve the performance criteria?**

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Herbarium collection techniques and ethics.
- Botany.
- Physical and biological habitat types (including vegetation associations and communities where appropriate).
- Plant nomenclature and taxonomy.
- OHS legislative requirements and Codes of Practice.
- Hazard identification assessment and control.

**What specific skills are needed to achieve the performance criteria?**

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Prepare for plant collecting
- Collect plant specimens
- Preserve specimens
- Identify plant specimens.
- Follow safe work practices.

**Are there other competency standards that could be assessed with this one?**

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

**Essential Assessment Information**

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTC5201A Conduct comprehensive inspection of park facilities

Unit Descriptor
This competency standard covers the process of inspecting comprehensively and auditing the safety of park/recreational facilities to identify non-conformities with Australian Standards, legislative and OHS requirements, and manufacturers standards. Conducting comprehensive inspections of park/recreational facilities is likely to be undertaken without supervision with only general guidance on progress sought by managers. Responsibility for and limited organisation of the work of others involved in the inspection may be required. Conducting comprehensive inspections of park/recreational facilities requires a broad range of skills and involves the application of extensive knowledge such as asset auditing and management, Playground Safety Management Systems, and structural principles and practices.

Unit Sector
No Sector Assigned

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prepare for comprehensive inspection of park facilities</td>
<td>1.1 Specific facilities and equipment to be inspected and purpose of the inspection are determined according to operational request.</td>
</tr>
<tr>
<td></td>
<td>1.2 Tools and equipment for testing and inspection are identified, and availability confirmed with appropriate personnel.</td>
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<td></td>
<td>1.3 Pre-operational and safety checks are carried out on tools and equipment according to manufacturers specifications and enterprise work procedures.</td>
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<td></td>
<td>1.4 Appropriate checklists and reporting formats are prepared to suit the application.</td>
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<tr>
<td></td>
<td>1.5 Different types of facilities are identified from checklist descriptions.</td>
</tr>
<tr>
<td></td>
<td>1.6 Specific terminology used in checklists is consistent with enterprise policy and guidelines.</td>
</tr>
<tr>
<td>2. Undertake comprehensive inspection of park facilities</td>
<td>2.1 Instances of non-conformity with Australian Standards, OHS guidelines and manufacturers standards are identified and recorded.</td>
</tr>
<tr>
<td></td>
<td>2.2 Inspections for structural integrity are undertaken in an efficient and safe manner according to enterprise policy.</td>
</tr>
<tr>
<td></td>
<td>2.3 Safety risks and hazards and situations are identified and detailed.</td>
</tr>
<tr>
<td></td>
<td>2.4 Checklist entries are concise and accurate.</td>
</tr>
<tr>
<td></td>
<td>2.5 Inspections are undertaken according to OHS requirements.</td>
</tr>
<tr>
<td>3. Assess age and predict effective lifespan of existing park facilities</td>
<td>3.1 The manufacturer of playground equipment and structures is identified through reference to original plans and specifications.</td>
</tr>
<tr>
<td></td>
<td>3.2 Age and future lifespan of park facilities are determined and recorded.</td>
</tr>
<tr>
<td></td>
<td>3.3 Costs of repair or replacement of park facilities are estimated and recorded.</td>
</tr>
<tr>
<td>4. Submit report and recommendations</td>
<td>4.1 Situations requiring urgent action are addressed according to OHS and enterprise policy.</td>
</tr>
<tr>
<td>--------------------------------------</td>
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</tr>
<tr>
<td></td>
<td>4.2 Concise and accurate reports are prepared and submitted to management.</td>
</tr>
<tr>
<td></td>
<td>4.3 Existing <strong>management systems</strong> are reviewed, particularly regarding frequency of inspection, and improved in consultation with management.</td>
</tr>
<tr>
<td></td>
<td>4.4 Recommendations for future action are consistent with industry standards and best practice.</td>
</tr>
<tr>
<td></td>
<td>4.5 Collected data and information is submitted for inclusion on the asset management system.</td>
</tr>
</tbody>
</table>
**KEY COMPETENCIES**

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Reports and recommendations resulting from the comprehensive inspection of park facilities should be communicated orally and in writing with the manager and other interested parties. There is likely to be discussion between the developer of the reports and recommendations and management to achieve objectives.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Some information will need to be researched and other obtained from inspection or audit results. Information addressing the specific requirements of the inspection should be analysed and outcomes discussed with the manager and other members of the work team. Inspection or audit results and recommendations for remedial action should be organised and presented as a documented report to management.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Inspecting, auditing, reporting and making recommendations should proceed in an orderly and efficient manner. Timely and appropriate information needs to be available for decision-making.</td>
<td>2</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>The comprehensive inspection of park facilities and equipment may require working with other members of the team to achieve the desired outcomes.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical application will be required to assess the scope, extent and costs of replacement or repair of components of park facilities and equipment.</td>
<td>3</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems relating to non-conformities, existing management systems, maintenance techniques, workplace safety, tools and equipment, and hazardous situations may be identified when inspecting or auditing park facilities. Recommendations which identify possible solutions and remedial action should then be drafted and submitted to the manager.</td>
<td>3</td>
</tr>
<tr>
<td>Key Competency</td>
<td>Example of Application</td>
<td>Performance Level</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology will be required to record, store and communicate ideas and information. It will also be used to obtain and analyse data from facility and equipment tests, and to produce reports and recommendations.</td>
<td>3</td>
</tr>
</tbody>
</table>

**RANGE STATEMENT**

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available.

For more information on contexts, environmental implications and variables for training and assessment, refer to the Sector Booklet.

**What facilities and equipment may be included in a comprehensive inspection?**

Facilities and equipment may include playgrounds, playground soft fall and pathways, play equipment, parks and street furniture and structures, bridges, boardwalks, decks and viewing decks, fences, barbeques, steps and stairs, bollards, tree and grass protection devices, and paved, turf and/or grassed recreational areas.

**What tools and equipment may be required?**

Tools and equipment may include a ladder, torch and electronically and manually operated testing and recording equipment appropriate to the park facilities and equipment to be inspected.

**What modes of non-conformity may be identified?**

Modes of non-conformity may include obvious or hidden hazards, worn or damaged components such as bearings and moving joints, structural instability and defective operation of equipment.

**What Australian standards may be relevant to this competency standard?**

Australian Standards may include those covering playgrounds, boardwalks, shelters, pathways, ramps for people with disabilities, lookouts and fences (e.g., AS4486.1, AS4422, AS1924.1 and AS1924.2).

**What aspects of structural integrity may be included in a comprehensive inspection?**

Structural integrity may include above or below ground assessment of damage, wear, rot, corrosion of posts, decks, load-bearing beams, fasteners, canopies and edging.

**What hazards may be identified?**

Visible hazards may include damaged parts, broken glass, loss of soft surfacing, protruding nails, bolts and splinters, sudden changes in surface levels such as holes and trip points, and worn, rusted and weathered components.
What OHS requirements may be relevant to this standard?

OHS requirements may include identifying hazards, assessing risks and implementing controls, cleaning, maintaining and storing tools and equipment, appropriate use of personal protective equipment including sun protection, safe operation of tools and equipment, basic first aid, personal hygiene, and reporting problems to supervisors.

What management systems may be reviewed?

Management systems may include Playground Safety Management Systems, asset registers, and physical resource, human resource and budget-related information systems.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in conducting a comprehensive inspection of park facilities requires evidence that a person is able to prepare for inspection activities and undertake testing and checking of park facilities to effectively identify non-conformities with Australian Standards, OHS requirements and manufacturers specifications, and to determine the effective lifespan of existing park facilities. The skills and knowledge required to conduct a comprehensive inspection of park facilities must be transferable to a different work environment. For example, this could include different facilities, environments, work sites and types of hazards.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Working knowledge of a range of park facilities and equipment including installation methods, intended use, intended users and safety parameters.
- Practical understanding of the terminology used to describe different components of park facilities and equipment.
- The different modes of non-conformity that may be identified in relation to specific park facilities and equipment.
- Relevant national industry standards (e.g., AS4486.1, AS4422, AS1924.1 and AS1924.2).
- Information management systems (e.g., AS4456).
- Practical understanding of inspection and auditing procedures and techniques, and legal and enterprise reporting requirements for recommendations on maintenance, repair and replacement of park facilities.
- OHS hazards associated with conducting a comprehensive inspection of park facilities and equipment, and the controls necessary to remove or minimise associated risks.
- OHS legislative requirements and Codes of Practice.
- Hazard identification, assessment and control.
What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Communicate orally and in writing with work team members and managers.
- Interpret standards, specifications and legal requirements.
- Utilise proforma reporting and work procedure documents.
- Interpret design symbols and terminology.
- Compare actual measurements of inspected components with legal, manufacturers and/or enterprise standards and specifications.
- Coordinate own work activities with other work groups to sequentially and effectively complete comprehensive inspection in a timely and cost effective manner.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
Manage machinery and equipment

This competency standard covers the functions involved in managing the maintenance and operation of machinery and equipment. It requires the application of skills and knowledge necessary to review and evaluate machinery and equipment operations as well as scheduling and monitoring maintenance requirements. In addition, it requires the ability to cost the productivity of machines and ensure the safe operation of equipment within enterprise environmental guidelines. The work will be carried out independently within own area of responsibility.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Evaluate machinery and equipment
   1.1 Operations of available machinery and equipment are reviewed and matched to production processes and OHS requirements.
   1.2 Operation and servicing costs of machinery and equipment are calculated to justify total purchasing price.
   1.3 Productivity returns from machinery and equipment are estimated to identify benefit to production processes.
   1.4 Machinery and equipment replacement cycles are monitored to identify improvement options and maximise life cycles of components.
   1.5 Machinery and equipment is accessed through appropriate procurement options.

2. Coordinate maintenance
   2.1 Maintenance and service cycles are identified and scheduled to ensure servicing is according to manufacturers specifications and production processes.
   2.2 Storing and housing of machinery and equipment is costed and organised.
   2.3 Maintenance is documented and recorded to ensure operational and service history.
   2.4 OHS hazards in the workplace are identified, risk assessed and recorded according to enterprise requirements.
   2.5 Suitable personal protective equipment is selected, used, maintained and stored according to OHS requirements.
   2.6 Repair and maintenance routines are developed and monitored according to manufacturers specifications and OHS requirements.

3. Monitor operations
   3.1 Consumables and operational support materials are available, maintained and disposed of according to enterprise requirements.
   3.2 Environmental implications and workplace safety practices are monitored according to OHS and enterprise requirements.
   3.3 Operational procedures are clear, documented and followed according to manufacturers specifications.
   3.4 Operators are provided with competent instruction and appropriate supervision according to OHS requirements.
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tr>
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<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Ideas and information with regard to maintenance requirements and costings may be discussed with staff and suppliers.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information with regard to the performance of machinery and equipment, faults and maintenance requirements, may be reported and organised by records.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Activities involving managing maintenance requirements may be planned and coordinated with staff and work schedules.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Team work may be applied in methods and procedures to monitor and carry out machinery and equipment maintenance.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical techniques may be applied in the calculation and measurement of volumes, weights and consumption particularly in relation to servicing requirements.</td>
<td>3</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Equipment breakdown, faults or malfunctions will need to be arranged for repair or replacement to complete maintenance plan requirements.</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>To access, communicate, monitor, measure and record information with regard to machinery and equipment maintenance, usage and performance.</td>
<td>3</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables explains the range of contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

What machinery and equipment may be applicable to this standard? Hydraulic equipment, agricultural and horticultural machinery and equipment, engines, irrigation equipment, earth moving equipment, spraying equipment, solar and wind powered equipment, lifting/elevated equipment, all vehicles/motorcycles, all types of park and turf maintenance machinery and equipment.
| **What hazards may be associated with these activities?** | Workplace hazards may include exposure to loud noise and fumes, solar radiation, dust, and hazardous substances. It may also include oil and grease spills, electricity, mechanical malfunctions and entanglement with machinery and equipment from exposed moving parts including hydraulics. |
| **What personal protective equipment may be relevant to this standard?** | This may include boots, hat/hard hat, overalls, gloves, protective eyewear, safety harness, hearing protection, respirator or face mask, and sun protection (sun hat, sunscreen). |
| **What OHS requirements may be relevant to this standard?** | Safe systems and procedures for:  
  - operating and maintaining machinery and equipment including hydraulics and guarding of exposed moving parts.  
  - hazard and risk control.  
  - manual handling including lifting and carrying.  
  - the provision of safety decals and signage.  
  - handling, application and storage of hazardous substances.  
  - outdoor work including protection from solar radiation, dust and noise.  
  - lock out or danger tag procedures.  
  - protection of people in the workplace.  
  - the appropriate use, maintenance and storage of personal protective clothing and equipment. |
| **What procurement options may be considered?** | Leasing, hiring, hire purchase, purchasing, share/part-purchasing, renting, and barter. |
| **What storing and housing options may be considered?** | On site, off site, seasonal, covered, open air, security and protected. |
| **What consumables and operational support materials may be used and maintained?** | Fuel, oils, lubricants, and battery levels. Wheels, tyres, fan belts, leads, lines, connections, and air filters. |
| **What enterprise requirements may be applicable to this standard?** | Standard Operating Procedures (SOP), industry standards, production schedules, Material Safety Data Sheets (MSDSs), work notes, minimising downtime, product labels, manufacturers specifications, operator's manuals, enterprise policies and procedures (including waste disposal, recycling and re-use guidelines), and OHS procedures. |
| **What environmental implications may be associated with machinery and equipment operation?** | Negative environmental impacts may result from excessive noise and exhaust emissions, the incorrect use and disposal of maintenance debris (oil containers, chemical residues), and hazardous substances (fuel, fertiliser). Impacts may also include run-off flows of water and cleaning agents from servicing, maintenance and cleaning activities, soil disturbance and dust problems from machinery and equipment operation. |
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence to manage machinery and equipment requires evidence of the ability to examine the specific needs of the production process and assess the applicability of specific kinds of machinery and equipment to these processes. It also requires the ability to conduct detailed testing and evaluation of the machinery and equipment. Evidence must be demonstrated in the employment of safe workplace practices including the elimination of occupational health and safety hazards, and an awareness of enterprise environmental practices to minimise negative impact. The skills and knowledge required to manage machinery and equipment must be transferable to a different work environment. For example, this could include different machinery and equipment, workplaces and industry sectors.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Servicing and maintaining machinery and equipment within area of responsibility.
- Methods of calculating the cost of machines and their contribution.
- Training and instruction techniques for directing the learning of staff.
- Relevant OHS issues, legislative requirements and Codes of Practice.
- Hazard identification, assessment and control.
- Environmental Codes of Practice with regard to maintenance of machinery and equipment and hazardous substances.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Monitor machinery and equipment operations.
- Identify and remove potential workplace hazards.
- Evaluate machinery and equipment.
- Identify skill needs of staff.
- Keep records, including machine maintenance histories.

- Use written and oral information about workplace requirements.
- Plan and organise work arrangements.
- Communicate orally, document plans and write reports for staff and management.
- Calculate resources, machinery and equipment and servicing costings.
- Identifying, assessing and controlling hazards.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.
Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
**RTC5504A Develop a management plan for a designated area**

**Unit Descriptor**
This competency standard covers the process of developing a management plan for a designated natural resource area. It requires the ability to define the need for a management plan, undertake preliminary planning activities, prepare a site description, analyse site information, identify management strategies and prepare the management plan. Developing a management plan for a natural resource area requires knowledge of management planning principles and issues, basic civil design, environmental assessment, survey and analysis techniques, native fauna and flora, pest plant and animals, revegetation techniques, wildlife habitats, and soil, plant and water testing processes and procedures.

**Unit Sector**
No Sector Assigned

<table>
<thead>
<tr>
<th><strong>ELEMENT</strong></th>
<th><strong>PERFORMANCE CRITERIA</strong></th>
</tr>
</thead>
</table>
| 1. Define the need for a management plan | 1.1 **Management plan objectives** are identified for the designated area.  
1.2 Brief is agreed in consultation with client.  
1.3 Planning team including specialists and consultants is identified. |
| 2. Undertake preliminary planning activities | 2.1 Major stakeholders are identified.  
2.2 Availability of specialists to assist in management planning work is ascertained and contracts are prepared where required.  
2.3 Timelines for development of the management plan and reporting arrangements to **client** are established.  
2.4 **Resources** required for the development of management strategies are identified. |
| 3. Prepare a site description | 3.1 **Landscape values** of the area are identified and mapped.  
3.2 **Physical features and characteristics** of the area are identified and mapped.  
3.3 **Land uses**, including current, cultural, and **historical modifications**, are researched and their effects on the natural resource area are determined and recorded.  
3.4 **Physical condition** of site is assessed and documented  
3.5 **Biological characteristics** of the site are documented. |
| 4. Analyse site information and description | 4.1 Information is evaluated in terms of core principles and objectives.  
4.2 Documents produced including plans, technical reports and maps.  
4.3 Priorities and key **conservation issues** are determined.  
4.4 Longitudinal projections of continuing impacts are prepared.  
4.5 **Land capability** is assessed.  
4.6 Opportunities and constraints to meeting planning objectives and goals are identified and documented.  
4.7 **Presentation** to stakeholders/clients is undertaken and feedback incorporated into planning documentation. |
5. Identify management strategies

5.1 Management strategies are identified that address defined objectives.

5.2 Management strategies are designed to alleviate existing impacts or to target management actions.

5.3 Management strategies are costed and compared to existing budgets and available resources.

5.4 Staging of work is planned to prioritise outcomes and management resource allocation.

5.5 Consultation with stakeholders/clients is undertaken and feedback incorporated into planning documentation.

6. Prepare the management plan

6.1 Site information and management strategies are documented into a draft management plan for consultation.

6.2 Consultation with stakeholders and clients is undertaken according to enterprise guidelines.

6.3 Changes are made to the draft plan, and a final plan is prepared and presented to client.
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<th>Key Competency</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Oral and written communication with implementation team, clients, suppliers, consultants, government agencies, community organisations, industry contacts and senior management is required.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information on the native habitat and management systems can be collected through site assessment, research, consultation with experts and own experience. This information will be analysed and organised in relation to the development of natural resource management plan objectives and resource availability. Reports including statistical and financial data will need to be generated.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Activities of self and other team leaders and members are planned and delegation is used to achieve outcomes.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Teamwork with colleagues, staff, experts and senior management based on effective, timely communication and consultation will help to achieve wetland management objectives.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Advanced mathematical understanding will be required to analyse data from external agents regarding project costs, and physical aspects such as dimensions, analysis results, application rates, and quantitative environmental impacts. Statistical data will need to be provided to support monitoring and evaluation of implementation of natural resource management strategies.</td>
<td>3</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems presented by collected data, known threats to the natural ecosystem, availability of information and resources, reconciling environment, financial and enterprise requirements in the development of strategies, will require problem-solving skills.</td>
<td>3</td>
</tr>
<tr>
<td>Key Competency</td>
<td>Example of Application</td>
<td>Performance Level</td>
</tr>
<tr>
<td>-----------------------------</td>
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<td>-------------------</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology used to gather information, prepare strategies, communicate, make presentations and keep records, may include computerised word processing, financial planning, email, internet and drafting, photography, video and slide equipment.</td>
<td>3</td>
</tr>
</tbody>
</table>

**RANGE STATEMENT**

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

**What comprises a management plan?**

Management plans define the core principles, objectives and responsibilities of the managing agent, cover the allocation of enterprise resources, and set parameters for resource access and use.

**What management plan objectives may be identified for the natural resource area?**

These may include objectives to provide habitat for wildlife and native predators (such as insect eating birds, parasitic wasps), maintain biodiversity, moderate local weather conditions (e.g., wind speed, rainfall run-off, watertable recharge, provide shade), selective removal of tree limbs for firewood and timber, selective harvest of seed for revegetation or human consumption, genetic resource for plant propagation and medicinal components, contribution to sustainable land use, aesthetic contribution to enterprise (such as a home-stay farm, for tourism).

**Who may be the client?**

The client may be a government agency or associated body, private landholder, or community group.

**What resources may be accessed to develop the natural resource management plan?**

This may include topographical, vegetation, and aerial maps, government, university and library based consultation, literature and internet resources, local written and oral histories of migrant and Aboriginal or Torres Strait Islander communities in the area, catchment area information and catchment management associations, local experts such as flora and fauna preservation, cultivation and identification community groups.

**What landscape values are relevant to this competency standard?**

Visual amenity, biodiversity, recreation and tourism, conservation, water and air quality, and cultural values.
<table>
<thead>
<tr>
<th>What features and characteristics may be included in the site description?</th>
<th>These may include boundaries, fences, gates, slope gradient, contours, water courses, current land use, buildings and structures, eroded areas, saline areas, soil toxicity, waterlogged areas, water table recharge and discharge sites, water-repellent soils, predominant wind directions, annual rainfall, surface stones and rocks, soil types and specific historic or cultural features.</th>
</tr>
</thead>
<tbody>
<tr>
<td>What historical modifications may be identified for the natural resource area?</td>
<td>These may include clearance, grazing, dry land and irrigated cropping, fire management for grass stimulation, and natural events, such as wildfire, flooding and drought.</td>
</tr>
<tr>
<td>What land uses may be relevant to this competency standard?</td>
<td>Agricultural, horticultural, silvicultural, recreational, industrial, commercial, and cultural.</td>
</tr>
<tr>
<td>What may be included under the physical condition of a site?</td>
<td>Impacts from weeds, pests, erosion, soil disturbance, run-off, water quality, people, vehicle intrusions, soil compaction, and adjacent land use.</td>
</tr>
<tr>
<td>What biological characteristics are relevant?</td>
<td>Native and introduced plants and animals, habitats, vegetation structure, and rare and endangered species.</td>
</tr>
<tr>
<td>What conservation issues may be identified for action?</td>
<td>Some examples of conservation issues may include priorities for protection, conservation and restoration works for key native flora and fauna species, disease and pest flora and fauna control, nutritional issues, and erosion, salinity and toxicity repair works and habitat rehabilitation and restoration of balance.</td>
</tr>
<tr>
<td>What may be included under land capability?</td>
<td>Suitability of recreational use, engineering works, conservation values, wildlife potential, soil profiles, visual amenity, agricultural and horticultural production.</td>
</tr>
<tr>
<td>What presentation techniques may be utilised to effectively present a description of the wetland site?</td>
<td>These may include video and photographic footage, documented historical, biological, physical and cultural descriptions, graphed and charted statistics, references and illustrations.</td>
</tr>
<tr>
<td>What management strategies may be identified for the natural resource management plan?</td>
<td>These should address the conservation priorities identified in the site description and may include objectives to protect the natural resource area from grazing and pest animals, control pest plants and diseases, control human impact, manage fire events (e.g., controlled use of hot and cold fires, wildfire prevention), establish vegetation links to nearby habitat islands, remove and redirect infrastructure such as roads, troughs and fences, conserve and enhance biodiversity and habitat balance, and monitor native habitats over time.</td>
</tr>
</tbody>
</table>
What available resources may influence the selection and priority of management objectives?

Resource availability issues may include private finance, government funding assistance, natural resource regulations and legislation, consideration for neighbouring enterprises, community in-kind support, existing indigenous flora and fauna, labour and existing administration facilities and infrastructure.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in developing a management plan for a natural resource area requires evidence that the person is able to work with a team to develop a management plan for an area that will address management objectives in accordance with the client's requirements for the area. The skills and knowledge required to develop a management plan for an area must be transferable to different work environments. For example, this could include different areas, environments and management objectives.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Management planning principles and issues.
- Basic civil design.
- Environmental assessment, survey and analysis techniques and practical application to a range of habitats and landscapes.
- Native fauna and flora identification physiology, habitat requirements, and seasonal and nutritional influences on life cycle.
- Pest plant and animal and disease identification, physiology, control techniques, and equipment, pesticides and habitat requirements.
- Techniques and strategies for use in the management, rehabilitation and enterprise use of a range of native Australian habitats, species and landscapes.
- Indigenous flora regeneration and revegetation techniques, equipment and methods of application in relation to a range of landscape characteristics.
- Management and rehabilitation techniques for the wildlife and habitat relevant to the natural resource area.
- Wildlife habitats associated with the natural resource area and local geographic region.
- Soil, plant and water testing processes and procedures, interpretation and application of results.
### What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Define the need for a management plan.
- Undertake preliminary planning activities.
- Prepare a site description.
- Analyse site information and description.
- Identify management strategies.
- Prepare the management plan.

### Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

### Essential Assessment Information

There is essential information about **assessing this competency standard for consistent performance** and **where and how it may be assessed**, in the Assessment Guidelines for this Training Package. All users of these competency standards must have **access** to both the Assessment Guidelines and the relevant Sector Booklet.
RTC5519A
Unit Descriptor
This competency standard covers the process of surveying and assessing vegetation and/or animals. Responsibility for the planning and management of the work of others may be required. Biological surveys are usually conducted within policy guidelines and procedures where discretion and judgement are required in the selection of survey techniques, work organisation, and the achievement of outcomes within time and budgetary constraints.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Carry out preliminary design activities for the biological survey
   1.1 Survey scope, objectives and constraints are identified according to client requirements, biological components to be surveyed and enterprise policy.
   1.2 All current data relevant to survey requirements is sourced, collated and evaluated according to enterprise policy.
   1.3 Processes for data collection are developed, consistent with the survey scope, objectives and constraints.
   1.4 Processes for data processing are developed, consistent with the survey scope, objectives and constraints.
   1.5 A survey design that reflects client requirements and survey scope, objectives and constraints is developed and presented to the client for discussion and approval.

2. Determine requirements of the biological survey
   2.1 Survey indicators are identified and constraints and opportunities for data collection identified and evaluated.
   2.2 Data collection points are identified that are repeatable and statistically representative for the biological survey.
   2.3 OHS hazards associated with conducting a biological survey are identified, risks assessed and controls developed according to enterprise guidelines, costed and documented in the survey design.
   2.4 Tools, equipment and machinery required for the biological survey are identified, costed and availability confirmed with suppliers, contractors and appropriate personnel.
   2.5 Scheduling of survey activities and surveyor access are determined according to the survey design.
   2.6 Survey procedures and schedules are documented according to scientific conventions and the survey scope and objectives, and are presented to appropriate personnel and the client for briefing and acceptance.
3. Conduct the biological survey

3.1 Field visits are conducted to verify and consolidate previously collected data and to gather further information on species frequency, distribution, health and/or habitat values.

3.2 The biological survey is conducted according to the survey design and enterprise policy.

3.3 Survey activities are monitored for accuracy, compliance to the survey design and out-of-specification procedures or events.

3.4 Staged data collection is undertaken according to survey design, survey scheduling and surveyor access requirements.

3.5 All monitoring and survey data is recorded promptly and accurately, according to the specifications of the survey design.

4. Compile a biological survey report

4.1 Analysis of collected data is undertaken according to industry policies and guidelines.

4.2 Conclusions about the biological survey are drawn from relevant information and are based on appropriate evidence and reasoned arguments.

4.3 A biological survey report is produced which conforms to industry standards for presentation, structure and content, and is presented to the client for acceptance.

4.4 The report describes biological survey findings according to the survey scope and objectives, identifies areas requiring remedial action for improvement and details recommendations for action.
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Oral and written communication with the client, enterprise staff, senior management, consultants or industry contacts will be required. There is likely to be negotiation between the developer of the biological survey and the client to achieve the survey objectives.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information about survey design and previous studies will be obtained through literature research and consultation. Survey design should be organised and presented as survey site plans, statements of projected outcomes, written work procedures, a timeline chart, and schedules for surveying activities. All individual records, collected field data, statistical analysis and findings should be organised, formatted and presented for the client according to enterprise standards and industry best practice.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>The planning and design process, conduct of the biological survey and organisation and presentation of findings should proceed in a logical, orderly and efficient manner. Timely and appropriate information needs to be available for decision-making. The survey design should reflect the activities required to effectively and accurately obtain objective results.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Survey design, conduct, analysis and production of assessment reports will involve working with other members of a team to achieve the survey objectives.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical concepts will be required to measure quantities, distances and times, calculate areas, resources, costs, conduct analysis of data, and present results of the biological survey.</td>
<td>3</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems relating to survey design, the variable nature of survey points, availability of resources and equipment, costs, monitoring of the surveying procedures and time line failures may arise as the survey proceeds and require remedial action.</td>
<td>3</td>
</tr>
</tbody>
</table>
### Key Competency

<table>
<thead>
<tr>
<th>Using technology</th>
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</thead>
<tbody>
<tr>
<td>Technology will be required to record, store and communicate ideas and information consistently, reliably and accurately. It will also be used to research relevant information, collect and process data from survey points, and to produce the survey design, analysis and assessment report.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance Level</th>
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<td>3</td>
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</table>

### RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environmental implications and variables for training and assessment, refer to the Sector Booklet.

**What scope may be specified for the biological survey?**

Survey scope may include the size of the area to be surveyed, the type of plant/animal community and the quantity and species within the community that are to be directly surveyed, regularity and replication of survey periods, and the extent of analysis and recommendations required.

**What objectives may be specified for the biological survey?**

Objectives may include monitoring of health, rate of growth/fecundity, successful establishment, decline of individual species and/or the specified biological community.

**What constraints may affect the biological survey?**

Constraints may be financial, time, scheduling, labour availability, seasonal, and government legislation and regulations.

**Who may be referred to as a client?**

Clients may include the enterprises management, or a private individual, company, community group, government agency or a combination of these entities.

**What biological components may be surveyed?**

Biological components cover vegetation and/or animals. Vegetation may include plant communities in parks, along roadsides and on rural properties. The plant communities may include remnant native vegetation, weeds and introduced species, regenerated or revegetated native areas. The vegetation to be surveyed may include a particular species, specified group of species or a specified area of vegetation.

Animals may include native or introduced species in parks, urban bushland, along roadsides and on rural properties. Animals to be surveyed may include a particular species, specified group of species, or a specified area of occurrence or habitat.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
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</thead>
<tbody>
<tr>
<td>What current data may be available for assessment?</td>
<td>Current data may include written or oral records, existing studies, and local and State government policy and practices affecting the species or area to be surveyed. Current data may relate to human intervention (such as clearance, cultivation, grazing, settlements, revegetation), landscape degradation (such as salinity, accelerated wind and water erosion, edge die-back, species depletion), natural fire and flooding events, surface water levels, watertable levels, toxicity, soil type and status, pest plant populations and pest animal activity.</td>
</tr>
<tr>
<td>What processes for data collection may be developed for the biological survey?</td>
<td>Processes may include the employment of staged visual assessments and checklists, photo points, aerial photography, plant/animal sampling, transect plant or associated animal counts, and examination of aerial or other existing photographs.</td>
</tr>
<tr>
<td>What processes for data processing should be developed for the biological survey?</td>
<td>Processes should include data recording, organising, analysis and presentation techniques.</td>
</tr>
<tr>
<td>What survey indicators may be identified?</td>
<td>Survey indicators should include a suite of linked, measurable units associated with the objectives of the survey.</td>
</tr>
<tr>
<td>What constraints and opportunities for data collection should be considered?</td>
<td>These may include aspects of surveyed species/communities and associated indicators (e.g., seasonal behaviour) that may influence the quality of data obtained or ability to obtain the data.</td>
</tr>
<tr>
<td>How may the data collection points be repeatable?</td>
<td>The data collection points must enable the surveyor to return at regular intervals (e.g., weekly, monthly, annually) to repeat the data collection activity so that the data may be comparatively analysed. The time of day or night for data collection may also require repeated consistency, to reduce variable factors.</td>
</tr>
<tr>
<td>How may the data collection point be statistically representative of the biological surveyed?</td>
<td>The data collection points should be suitably distanced logistically, spatially or sequentially from other data collection points to prevent overlap of information or collection of variable data that may detrimentally affect the survey analysis.</td>
</tr>
<tr>
<td>What OHS hazards may be associated with conducting a biological survey?</td>
<td>Hazards may include solar radiation, extreme weather conditions, air, soil and water borne microorganisms, chemicals and hazardous substances, sharp hand tools and equipment, manual handling, insect, spider and snakebite, slippery and uneven surfaces, and moving vehicles.</td>
</tr>
</tbody>
</table>
### What controls may be introduced to minimise the risk of OHS hazards?

Controls should be introduced according to enterprise OHS policies and procedures and may include identifying hazards, assessing and reporting risks, cleaning, maintaining and storing tools, equipment and machinery, appropriate use, maintenance and storage of personal protective equipment including sun protection and high visibility clothing, safe operation of tools, equipment and machinery, safe handling, use and storage of chemicals and hazardous substances, correct manual handling, basic first aid available on site, personal hygiene, and reporting problems to managers.

### What tools, equipment and machinery may be required to conduct a biological survey?

Tools, equipment and machinery may include computers and appropriate software, photographic equipment, potentiometer, tape measure, flagging tape, site or district maps, compass, recording implements, survey point markers and drivers, Global Positioning System (GPS), specimen bags, secateurs, leaf tissue collection equipment, field testing reagents and tools, and binoculars.

### What requirements for surveyor access may be considered?

Regular access to survey points may require the issue of permits or land manager assistance. Access may be pedestrian or vehicular. Detrimental environmental impacts may be associated with the establishment of regular access routes, particularly in heritage, endangered or rare flora or fauna habitats.
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in conducting a biological survey requires evidence that a person is able to identify a biological species or community and conduct a survey according to client requirements that enables detailed description and assessment of the specified biological components. The skills and knowledge required to conduct a biological survey must be transferable to a different work environment. For example, this could include different species, communities, survey methods or areas being surveyed.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Biological classification systems.
- Plant/animal recognition.
- Environmental factors that impact on vegetation/animal populations.
- Ecological principles and terminology.
- Energy flows and trophic structures of communities.
- Legal requirements relating to the protection and clearance of vegetation and/or animal species.
- Assessment, reporting and client liaison procedures and best practice techniques.
- Enterprise work team management guidelines.
- OHS legislative requirements and Codes of Practice.
- Hazard identification, assessment and control.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Communicate and negotiate orally and in writing with the client, enterprise staff, managers and consultants.
- Research and evaluate information.
- Calculate the cost requirements of components of the biological survey.
- Assess survey findings and produce written reports and conclusions based on appropriate evidence and reasoned arguments.
- Comply with legislative requirements.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.
| Essential Assessment Information | There is essential information about **assessing this competency standard for consistent performance** and **where and how it may be assessed**, in the Assessment Guidelines for this Training Package. All users of these competency standards must have **access** to both the **Assessment Guidelines** and the relevant **Sector Booklet**. |
RTC5520A Manage parks and reserves

Unit Descriptor
This competency standard covers the process of managing parks, reserves, gardens and open spaces. Management involves implementing enterprise business and associated plans including the purchasing plan, managing the enterprise office, scheduling park operations, monitoring operations in relation to goals and objectives, and recommending improvements to operations. Work is likely to be under limited supervision with checking on overall progress by senior managers. Responsibility for the planning and management of the work of others will be required. Managing parks and reserves is usually performed within policy guidelines and procedures where discretion and judgement are required in the selection of technology, work organisation, and the achievement of outcomes within time and budgetary constraints.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Implement business, financial, marketing and human resource management plans
   1.1 Goals and objectives for park or reserve management, and the goals and objectives or charter of linked external agencies are identified.
   1.2 Actions required to achieve plans are identified and operational objectives determined.
   1.3 Roles, responsibilities and performance targets of staff and work groups are communicated to appropriate personnel.

2. Implement and monitor a purchasing plan
   2.1 Purchasing plan is communicated to responsible personnel, systems initiated and monitored, and inventories maintained according to enterprise policy and procedures.
   2.2 Quantity, quality and timing of supply of each input and service are determined according to the business plan and cash flow budgets.
   2.3 The purchasing system and records facilitate the selection of suppliers and arrangement of orders.
   2.4 Inefficiencies, stock outs and system problems are isolated, solutions identified and systems modified according to enterprise policy and procedures.
   2.5 Asset databases are established and asset management reports are prepared and presented according to enterprise policy and procedures.
   2.6 OHS criteria are considered in all purchase decisions.
3. Schedule park or reserve operations

| 3.1 | Schedules and timelines of operations are documented in a form that is accessible and understandable to all relevant personnel. |
| 3.2 | Quantity, quality and timing of supply of each input and service are identified and coordinated according to the financial, physical and human resource requirements of the operation. |
| 3.3 | Operations are coordinated to ensure that available labour matches the quantity and type of work to be completed. |
| 3.4 | Key performance outcomes and indicators are established to measure performance of all park or reserve operations and personnel. |
| 3.5 | Benchmarking is undertaken according to enterprise policy. |
| 3.6 | Coordination inefficiencies and problems are isolated, solutions identified, and systems modified according to OHS requirements and enterprise policy and procedures. |

4. Manage enterprise office

| 4.1 | Office and administrative systems and communications necessary for the well-ordered running of a business enterprise are developed and implemented. |
| 4.2 | Equipment relevant to the well-ordered running of the enterprises office is acquired where appropriate and is cost effective. |
| 4.3 | OHS hazards are identified, risks assessed and suitable controls implemented. |
| 4.4 | Innovations in office procedures are assessed and implemented where appropriate. |

5. Monitor, review and report on changing conditions

| 5.1 | Systems are established to monitor operational objectives, identify variance from plans and adjust actions where necessary. |
| 5.2 | Systems are established to monitor the immediate and related environments. |
| 5.3 | Variances likely to affect the achievement of business, financial, marketing and human resource management goals and objectives are identified and reported to senior management in a timely fashion. |
| 5.4 | Records are maintained, reports provided and reviews documented according to enterprise policy. |

6. Recommend improvements to operations

| 6.1 | Operations are reviewed and possible improvements affecting business planning, personnel morale, productivity and systems efficiency are identified. |
| 6.2 | Recommendations for improvements to operations are documented, supported by appropriate evidence and reasoned arguments, and presented to senior management. |
### KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Oral and written communication with staff, supervisors, managers, suppliers, contractors, external agencies, industry contacts, community organisations and the public will be required.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information for the development of operational plans will be collected through interpretation of enterprise plans, consultation with appropriate personnel and from own experience. This information will be analysed and organised in relation to the achievement of enterprise goals and objectives and available financial, physical and human resources. Reports including statistical and financial data will need to be produced for senior management.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>The planning and organisation of own work and that of others should proceed in a logical, orderly and efficient manner. Timely and appropriate information needs to be available for decision-making. Park and office operations, purchasing, scheduling, monitoring, performance management and reporting should reflect the activities required to achieve the enterprise business plan.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Park management will involve participating in, facilitating and leading a team or teams to achieve the enterprise business plan.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical understanding will be required to analyse data regarding maintenance and development budgets, income and expenditure, and physical aspects such as dimensions, application rates, energy conversion rates and quantitative environmental impacts. Statistical data will need to be provided to support monitoring and evaluation of park operations.</td>
<td>3</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems of a complex nature relating to all aspects of management will require problem-solving skills.</td>
<td>3</td>
</tr>
</tbody>
</table>
### Key Competency

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Using technology</td>
<td>Technology will be required to record, store and communicate ideas and information related to management of the park or reserve. It will also be used to research relevant information, collect, process and analyse data from park operations and performance management, and to produce reports on performance and recommended improvements.</td>
<td>3</td>
</tr>
</tbody>
</table>

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**RANGE STATEMENT**

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environmental implications and variables for training and assessment, refer to the Sector Booklet.

**What external agencies may a manager of a park or reserve have to deal with?**

External agencies may include the taxation commissioner, government agencies, financing agencies, business organisations, industry bodies, community advisory committees, sporting or volunteer associations, and other community organisations.

**What assets may be managed in parks and reserves?**

Assets may include buildings, facilities, vehicles, tools, equipment and machinery, sporting grounds, playgrounds, picnic areas, camping grounds and natural areas (e.g., native Australian flora, fauna species or ecological areas), historic or culturally significant areas, objects, structures and buildings, and heritage listed attributes within the park or reserve.

**What operations may be undertaken when managing parks and reserves?**

Operations may include maintenance, monitoring and development activities for turf, gardens, aquatic and wetland areas, playgrounds, natural ecosystems, access roads and visitor facilities, organising special events, organising restoration of a site, revegetation, landscaping an area, and changing the use of a site.
What OHS requirements may be relevant to this standard?

Safe systems and procedures for:

- operating and maintaining machinery including hydraulics and guarding of exposed moving parts.
- hazard and risk control.
- manual handling including lifting and carrying.
- the provision of safety decals and signage.
- handling, application and storage of hazardous substances.
- outdoor work including protection from solar radiation, dust and noise.
- lock out or danger tag procedures.
- protection of people in the workplace.
- the appropriate use, maintenance and storage of personal protective clothing and equipment.

What administrative and office systems may be developed for the management of parks and reserves?

Systems may include incoming and outgoing mail, financial transactions, accounting, employee wage records (tax, workers compensation, superannuation, leave entitlements), and filing or archiving of statutory statistics.

What hazards may be associated with park and garden management?

Hazards may include solar radiation, dust, hazardous substances, noise, through traffic, uneven surfaces, holes, and moving machinery and machinery parts.

What elements of the immediate and related environments may require monitoring?

- Immediate environments may include the naturally occurring or native ecosystem and cultivated environments within the park or reserve.
- Related environments may include neighbouring and geographically linked land (e.g., a recharge or discharge area for a watertable), or water bodies outside the boundaries of the park or reserve.
What evidence is required to demonstrate competence for this standard as a whole?

Competence in managing parks and reserves requires evidence that a person is able to apply technical and other skills such as communication, negotiation, organisation and coordination to the management of personnel and systems necessary for the effective maintenance, monitoring, and development of parks and reserves. The skills and knowledge required to manage parks and reserves must be transferable to a different work environment. For example, monitoring, reviewing and developing work systems to improve operations will be required whether managing a publicly owned or privately owned park, reserve or garden.

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Enterprise management policies and procedures.
- Budgeting, monitoring systems and allocation of monetary resources.
- Asset and resource management.
- Sports and recreational land use applications and associated environmental implications.
- Management information systems.
- Performance management and benchmarking.
- Staff training and development principles, practices and techniques.
- Technologically assisted management tools such as computing systems, software and hardware, and telecommunications equipment.
- Legislative and regulatory requirements relevant to parks and reserve land use applications and management activities (e.g., OHS, HAZCHEM, dangerous goods, duty of care and Australian Standards as they apply to Parks and Gardens - AS/NZS 4486.1:1997).
- Policies applying across all levels of government and within the specific region, including those under catchment plans.
- International treaties, agreements and charters including Australian Natural Heritage Charter and the Burra Charter.
What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Interpret business, financial, marketing and human resource management plans.
- Communicate clearly and effectively, orally and in writing for the understanding of staff, supervisors, managers, suppliers, contractors, external agencies, industry contacts, community organisations and the public, using a variety of media and techniques.
- Prepare and present effective operational reports to senior management.
- Assign work, receive and interpret staff feedback and consultants reports, and respond effectively to achieve management objectives.
- Implement performance and OHS management systems.
- Assess financial systems, prepare and monitor budgets and liaise effectively with consultants and other industry contacts on the spatial and logistical aspects of management systems and on-ground operations.
- Assess environmental impacts on the immediate and related environments and impact reduction techniques.
- Research and consult to obtain the information required for effective maintenance and development of the park or reserve.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTC5701A Establish and maintain the enterprise OHS program

Unit Descriptor
This competency standard covers the process of establishing and maintaining the enterprise Occupational Health and Safety (OHS) program. It requires the ability to develop OHS policies and procedures that demonstrate enterprise commitment to OHS, establish and maintain participative arrangements, develop OHS safety induction and training programs, and evaluate the enterprise OHS system. Establishing and maintaining the enterprise OHS program requires knowledge of significant hazards in the workplace, relevant OHS legislation and Codes of Practice, risk control measures, and relevant management systems and procedures.

Unit Sector
No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Develop OHS policies and procedures
   1.1 An OHS business plan and program is developed for the enterprise in consultation with designated personnel and/or management.
   1.2 OHS responsibilities and duties are clearly defined, allocated and included in job descriptions and duty statements for all relevant positions.
   1.3 Financial and human resources for implementation of OHS policies and procedures are identified, sought and/or provided as required.
   1.4 Information on the OHS system and procedures for the area of responsibility is provided and explained in a form which is readily understood by employees.

2. Establish and maintain processes to ensure the participation of all employees in the application of OHS
   2.1 Consultation processes are established and maintained with employees and their representatives in accordance with relevant legislation and according to enterprise guidelines.
   2.2 Issues raised though participation and consultation are dealt with and resolved promptly and effectively in accordance with enterprise procedures for issue resolution.
   2.3 Information about the outcomes of participation and consultation is provided in a manner readily accessible to employees.

3. Establish and maintain procedures for identifying hazards
   3.1 Existing and potential hazards within the area of responsibility are identified and confirmed in accordance with legislation, Codes of Practice, and trends identified from the OHS records system.
   3.2 A procedure for ongoing identification of hazards is developed and integrated within systems of work and procedures.
   3.3 Activities are appropriately monitored to ensure that this procedure is adopted effectively throughout areas of managerial responsibility.
   3.4 Hazard identification is addressed at the planning, design and evaluation stages of any change in the workplace to ensure that new hazards are not created.
4. Establish and maintain procedures for assessing risks

4.1 Risks associated with identified hazards are assessed in accordance with safe work practices, with information derived from workplace OHS records and industry wide information, and with relevant OHS legislation and Codes of Practice.

4.2 A procedure for ongoing assessment of risks is developed and integrated within systems of work and procedures.

4.3 Activities are monitored to ensure that risk assessment procedures are adopted effectively throughout the area of managerial responsibility.

4.4 Risk assessment is addressed at the planning, design and evaluation stages of any change in the workplace to ensure that the risk from hazards is not increased.

4.5 Accident and dangerous occurrences are investigated and recorded according to enterprise and OHS procedures.

5. Interim risk control measures are implemented until a better or permanent control measure is developed

5.1 Measures to control assessed risks are developed and implemented in accordance with the hierarchy of control, relevant OHS legislation, Codes of Practice, and trends identified from the OHS records system.

5.2 When measures which control a risk at its source are not immediately practicable, interim solutions are implemented until a permanent control measure is developed.

5.3 A process of ongoing hazard identification and risk assessment, and review of effectiveness of control programs is developed and integrated into enterprise management arrangements.

5.4 Activities are monitored to ensure that the risk control procedure is adopted effectively throughout the area of managerial responsibility.

5.5 Risk control is addressed at the planning, design and evaluation stages of any change in the workplace to ensure that adequate risk control measures are included.

5.6 Systems are designed to reduce risk and administrative arrangements to ensure safe OHS work practices are put in place where elimination of a hazard is not possible.

5.7 Effective OHS risk management measures are set in place during any modification of the buildings and structures, machinery and work activities.

5.8 Inadequacies in existing risk control measures are identified and resources enabling implementation of new measures are sought and/or provided according to appropriate workplace procedures.

6. Plan and manage enterprise procedures for dealing with hazardous events

6.1 Potential emergencies posing risk to health and safety of workers and the public are correctly identified.

6.2 Plans and procedures which control the risks associated with hazardous events and meet any legislative requirements as a minimum, are developed in consultation with appropriate emergency services.

6.3 Appropriate information and training is provided to employees to enable implementation of correct emergency procedures.

6.4 Adequate numbers of workers are trained in First Aid to ensure that first aid is applied to preserve life and minimise injury.
7. Establish and maintain an OHS safety induction and training program

7.1 An OHS induction program is developed to meet the occupational health and safety needs of new employees.

7.2 An OHS training program is developed as part of supervisors and employee's general training.

8. Establish and maintain a system for OHS records

8.1 A system for keeping OHS records is established and monitored to allow identification of patterns of occupational injury and disease in the enterprise.

8.2 Records are regularly updated and used to evaluate the effectiveness of the enterprise OHS program.

9. Evaluate the enterprise OHS system and related policies, procedures and programs

9.1 The effectiveness of the OHS system and related policies, procedures and programs is assessed according to enterprise aims with respect to OHS.

9.2 Improvements to the OHS system are developed and implemented to ensure more effective achievement of enterprise aims.

9.3 Compliance with OHS legislation and Codes of Practice is assessed to ensure that legal OHS standards are maintained as a minimum.

KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>By establishing and maintaining participative processes for the management of OHS.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>By evaluating the enterprise OHS system.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>By ensuring compliance with OHS legislation and codes.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>By providing information and training to staff.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>By calculating costs, setting priorities and developing OHS business plan.</td>
<td>3</td>
</tr>
<tr>
<td>Solving problems</td>
<td>By determining best possible options, setting priorities and overcoming difficulties to reduce injury risk.</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>By using a computer to communicate and record OHS activities.</td>
<td>3</td>
</tr>
</tbody>
</table>
**RANGE STATEMENT**

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

| What processes for consultation are relevant to this standard? | OHS committees, consultation with health and safety representatives, issue resolution procedures and participative/consultative procedures conducted by supervisory staff within the area of managerial responsibility. |
| Which hazards may be relevant to this unit? | Hazards in the workplace, risks associated with plants and animals, risks associated with bystanders/public, levels of heath and fitness, OHS emergencies in land-based workplaces. |
| What methods to control a risk may be included? | General duty of care, following regulations and Codes of Practice, use of protective clothing or equipment, handling hazardous substances carefully. |
| What procedures for dealing with hazardous events may be associated with this unit? | Provision of clear directions to the location of an emergency using relevant National, State and local references. |
| How can training of adequate number of workers be determined? | By completion of recognised first aid training and maintaining skill levels to ensure that injured workers receive effective treatment while awaiting medical attention. |
| What records may be included in this standard? | OHS audits and inspections, action taken to control OHS risk, OHS induction and training of workers, registers of hazardous substances (including pesticides), use of hazardous substances and health surveillance results, workers occupational injury and illness, and Material Safety Data Sheets (MSDS) of hazardous substances. |
# EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in establishing and maintaining the enterprise occupational health and safety program requires evidence that knowledge and skills has been applied in the establishment, maintenance and evaluation of an enterprise OHS system as set out in this competency standard, and according to enterprise guidelines and relevant acts. The skills and knowledge required to establish and maintain the enterprise occupational health and safety program must be transferable to a range of work environments and contexts. For example, this could include different workplaces, legislative frameworks and industry sectors.

## What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Significant hazards in the workplace.
- All relevant OHS legislation and Codes of Practice consistent with the elements of competence, the hierarchy of OHS risk control and its implementation for hazards in land-based industries.
- Risk control measures.
- Hierarchy of control.
- Relevant management systems and procedures.
- Public safety issues.

## What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Develop OHS policies and procedures which demonstrate enterprise commitment to OHS.
- Establish and maintain arrangements to ensure the involvement of all employees in the management of OHS.
- Establish and maintain procedures for identifying hazards.
- Establish and maintain procedures for assessing risks.
- Establish and maintain procedures for controlling risks.
- Establish and maintain enterprise procedures for dealing with hazardous events.
- Establish and maintain an OHS safety induction and training program.
- Establish and maintain a system for OHS records.
- Evaluate the enterprise OHS system and related policies, procedures and programs.
- Analyse recorded data to determine where the OHS program can better meet enterprise and employee needs.

## Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.
| Essential Assessment Information | There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet. |
RTC5702A

Unit Descriptor

Develop and manage a chemical use strategy

This competency standard covers the process of developing, implementing and managing a chemical use strategy. High level skills include risk analysis, risk control, risk management, use of Integrated Pest Management, Integrated Resistance Management, Animal Health Management and communication are required. Extensive knowledge of equipment and its use, legislation, regulations and safety procedures associated with chemical use is also needed.

NB: This competency standard may be deemed to have a time limit when used as part of an accreditation or licence to purchase or use chemicals.

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Identify and evaluate need for chemical use

   1.1 Integrated Pest Management (IPM) and Integrated Resistance Management (IRM) strategies are interpreted and the organisational chemical requirements are identified.
   1.2 External requirements for chemical use are identified and relevant information obtained and interpreted.
   1.3 Requirements for chemical use are documented.
   1.4 Chemicals available to meet requirements are identified and information concerning their application is reviewed.

2. Develop a chemical use risk management strategy

   2.1 Hazards in the transportation, storage and handling of chemicals are identified and assessed.
   2.2 Risk factors associated with the use of chemicals are identified and documented.
   2.3 Risk control measures are identified and developed in accordance with regulatory requirements.
   2.4 A risk management strategy for chemical use is developed in accordance with legislation and Integrated Pest Management, Integrated Resistance Management, and Integrated Animal Health Management principles.
   2.5 Appropriate insurance policies covering intended chemical use are researched and documented according to enterprise guidelines.

3. Develop and implement procedures for chemical management and use

   3.1 Procedures for management and use of chemicals are developed in accordance with directions and standards.
   3.2 Required precautions and risk control measures are documented.
   3.3 Procedures for communicating and negotiating with the community are developed.
   3.4 Information on procedures and precautions in the management and use of chemicals is distributed to relevant staff.
4. Identify training and supervision needs and solutions for chemical use in the workplace

4.1 An appropriate strategy is developed for the training, assessment and supervision of staff involved in chemical use including correct use/fit of personal protective equipment.

4.2 Suitable internal on-the-job training and monitoring of performance in the implementation of the chemical use strategy is organised and provided.

4.3 Appropriate external training and assessment in the management and use of chemicals is organised.

5. Monitor and evaluate the implementation of a chemical use strategy

5.1 The implementation of the established chemical use strategy is monitored in terms of regulatory requirements and established criteria.

5.2 The effectiveness of the established chemical use strategy is evaluated.

5.3 Appropriate action is initiated where there are identified problems or where required procedures/precautions are not being correctly followed.

**KEY COMPETENCIES**

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Informing staff about the details of a chemical use management strategy will involve high level communication processes.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Identifying and analysing need for chemical use in a workplace. Accessing and interpreting information on chemicals, regulations and MSDS.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Carrying out a risk management analysis on chemical use in a workplace requires multiple activities to be organised.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Working with staff to ensure that a chemical use strategy fulfils the organisations needs, e.g., through health and safety meetings.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Carrying out calculations required in chemical use management strategies, e.g., chemical mixture calculations.</td>
<td>3</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Identifying risks and potential problems associated with chemical use and developing solutions.</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>Developing effective strategies for the maintenance, calibration and use of chemical application equipment.</td>
<td>3</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

What are external requirements for chemical use?

Chemical use regulations and legislation, best practice systems, mandatory Codes of Practice, chemical manufacturers instructions, labels and Material Safety Data Sheets (MSDS).

How might chemical use be documented?

Using computer records, log books, calendars or journals.

What chemicals may be considered for use?

Chemicals may include insecticides, fungicides, herbicides, bactericides, algaecides, biologicals, nematocides, rodenticides, fumigants, antimicrobial agents, anthelmintics, hormone growth promotants, or a range of veterinary chemicals used to treat animals for disease.

What information may be relevant to chemical application?

Information may include labels, MSDS, operator's manuals, industry standards, OHS manual or hazardous substances regulation.

What hazards may occur in the transportation, storage, handling and use of chemicals?

Hazards will be listed on labels and the MSDS for the chemical concerned and may include flammability, toxicity, health hazards, damage to non-target organisms, environmental damage, or residues in foods.

What risk factors may be relevant to this standard?

• Risks to environment may include pollution of ground or surface waters, damage to habitats, damage to sensitive land, or damage to community amenity due to spray drift.
• Risks associated with the produce include chemical residue in plant produces, livestock or water.
• Risks associated with OHS include exposure to chemicals during handling and application, and public health risks.

What risk control measures may need to be applied in the transportation, storage, handling and use of chemicals?

Measures may include providing instructions for handling, transport, storage, obtaining appropriate insurance policies, application and disposal of chemicals in the workplace, ensuring workers read and follow instructions on product label and MSDS, ensuring use, maintenance and storage of correct personal protective equipment, training and accreditation of all staff using chemicals, and ensuring all staff using a chemical understand the specific risks involved and the associated precautions required.

What legislation and regulations may be relevant to this standard?

What procedures may need to be addressed in a chemical use management strategy?

Procedures may include identifying needs for specific chemical use as part of IPM/IRM, reading and interpreting product labels and MSDS, mixing chemicals, calibration of application equipment, application of specified products, disposal of unused product, checking, maintenance, repair and disposal of equipment and containers, procedures and precautions for transport and storage, emergency procedures in event of spillage, contamination, accidental contact or ingestion, procedures for keeping records (e.g., chemical inventory, details of chemical use), training and assessment strategy for staff.

What directions and standards may be relevant to this standard?

Directions and standards may include a risk management strategy, registration requirements and IPM/IRM strategies.

What training and assessment strategies may need to be established as part of chemical use management?

• **Internal** training may include on-job coaching and instruction by qualified trainers, performance appraisal by supervisors, training programs conducted in the workplace by contracted registered training organisations.
• **External** training and assessment options may include training programs conducted by registered training organisations, or workshops organised by registered training organisations.

What criteria may be established to evaluate chemical use strategy?

Criteria may include monitoring pest levels over time from an established benchmark.
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Overall competence in this standard requires evidence that a person can identify and consider the requirements for chemical use at a workplace and develop a chemical use management strategy based on a consideration of the available suitable chemicals, and the hazards and risks in their use. The evidence will demonstrate that the person has an understanding of a range of chemicals and the factors that need to be taken into account when carrying out a risk management analysis.

Evidence will include a chemical use management strategy that details chemical use requirements, details of selected chemicals (including specific identification and justification for chemicals selected), any special accreditation requirements for the use of any chemicals identified in the strategy, procedures and precautions for the transport, storage, handling and application of the identified chemicals including disposal of unused product, emergency procedures including first aid and reporting requirements, training or assessment arrangements and record keeping arrangements.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Hazards to human health, agricultural produce, and all aspects of the environment and non-target species of flora and fauna associated with the transport, storage, handling, application and disposal of chemicals.
- Factors that contribute to spray drift, measures to assess the potential for spray drift and prevent or control its occurrence, and the elements of a spray drift management strategy.
- Routes of entry of chemicals into the body and the implications of this on chemical use management strategies.
- Safety procedures including the maintenance, use, fit and decontamination of personal protective clothing and equipment.
- Influence of meteorological factors (temperature, humidity, rain) on quality of chemical application, drift potential, effectiveness and efficacy of use.
- Precautions and risk control measures that may be used to minimise risks and hazards associated with the use of chemicals.
- Principles of IPM/IRM/IAM and their benefits in terms of chemical use risk management.
- Emergency procedures for safety incidents involving chemicals.
- Requirements and options for the keeping of records on chemical use and equipment maintenance and repair.
- Principles of residue effects and their management including persistence in soil and water, accumulation in agricultural produce, rate of breakdown of residues in produce and in the environment, withholding periods, and ways in which residues can occur.
- Movement of and persistence and degradation of different types of chemicals in various areas of the environment such as soil, air and water.
- Industry waste agreements, for example drum MUSTER,
and Chem Collect
• OHS legislative requirements and Codes of Practice.
• Appropriate insurances covering chemical use, transportation and storage.
• Correct wearing/fit of personal protective equipment.
• Use of chemicals as part of a comprehensive Quality Assurance (QA) system, Industry QA programs and performance standards.

What specific skills are needed to achieve the performance criteria?
To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:
• Accurately read and interpret labels on chemicals and MSDS.
• Determine the level of hazard and risk associated with chemical use in terms of human health, environment, fauna, flora and produce.
• Apply risk management techniques.
• Develop and evaluate management plans and organisational procedures.
• Communicate management plans, strategies and procedures to staff.

What are the special assessment conditions for this competency standard?
Where this competency standard is being used as part of an accreditation or licence for purchase or use of chemicals, the assessor must meet the requirements of the issuing body.
This may include:
• Accreditation with that issuing body.
• Maintenance of current competency in this competency standard.

Involvement in professional development programs comprising technical and legislative updates on an annual basis.

Are there other competency standards that could be assessed with this one?
This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information
There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
RTC5801A Provide specialist advice to clients

Unit Descriptor
This competency standard covers the process of providing specialist advice to clients relevant to agriculture, horticulture, or conservation and land management. It requires the ability to develop and maintain technical knowledge, communicate with clients, and formulate a response to client enquiries and needs. Providing specialist information to clients requires knowledge of environmental sustainability and land use issues, enterprise policy, legislation and consultation methods, techniques and protocols.

Unit Sector
No Sector Assigned

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Develop and maintain specialist knowledge | 1.1 A comprehensive knowledge and understanding of **specialist information** is actively and regularly researched from **industry** and other sources.  
1.2 Characteristics of industry practices, products and services are identified and understood using available documentation.  
1.3 Information is accurately documented and maintained in a format consistent with **enterprise requirements**.  
1.4 Acquired knowledge is applied to improve quality within personal work areas. |
| 2. Communicate with clients | 2.1 **Communication with clients** is conducted in a professional and courteous manner according to enterprise requirements.  
2.2 Appropriate **interpersonal skills** are used to facilitate accurate and relevant exchange of information.  
2.3 Work reflects sensitivity to **client's requirements**, specific needs and cultural, family and individual differences. |
| 3. Provide a response to client enquiries and needs | 3.1 Information relevant to client's needs is provided in line with enterprise requirements.  
3.2 Information emphasises issues relevant to client needs.  
3.3 Information is based on sound environmental practices and procedures and is achievable within enterprise **resources**.  
3.4 Evidence in support of information is **researched**, shown to be verifiable and presented in a suitable format.  
3.5 Information is structured to identify clear benefits to clients and the organisation.  
3.6 Information is presented in a professional format and style to the client for consideration and discussion.  
3.7 **Client feedback** is evaluated to improve future provision of technical information. |
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Through verbal and written responses to client enquiries on relevant technical matters.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Through documentation of research on technical information in a format that complies with enterprise guidelines.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>As a formal response to client enquiries, requirements and problems.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>In compiling responses and follow up to client enquiries.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Where a client enquiry relates to quantities or costs of product or services.</td>
<td>3</td>
</tr>
<tr>
<td>Solving problems</td>
<td>As a response to client enquiries or complaints of a technical nature.</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>Through the use of communication equipment when providing information to clients.</td>
<td>2</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

What specialist information may be relevant to this standard?

Specialist information may cover plants and animals and their characteristics and habitats, weeds, pests and diseases and their control, agricultural, horticultural and/or land management practices, products and treatments, ecological restoration of natural areas and issues related to environmental sustainability and impacts.

Common and botanical names will be used when providing information and recommendations on plants. Common and scientific names may be used where required in describing animal species.

What industry sources of information may be relevant to this competency standard?

Enterprise or public library, websites, suppliers and contractors, enterprise supervisor and team colleagues, and experts in the local area or industry sector. It may also include personal or enterprise reference collection.
| **What enterprise requirements may be relevant for this standard?** | These may include guidelines for compliance with industry best practice standards, client liaison policy, legal requirements, and enterprise OHS policy. |
| **What communication skills are required for this competency standard?** | Listening, questioning, illustrating examples for confirmation and providing the client with an accurate and clear description of the service that the enterprise can provide. |
| **What type of client may be relevant to this standard?** | Customers, members of the public, other businesses, fellow staff, supervisors, managers, team leaders and government agencies. |
| **What is included under interpersonal skills?** | Appropriate body language, summarising and paraphrasing to check understanding of clients message, providing an opportunity for the client to confirm their request, questioning to clarify and confirm the clients needs, and listening actively to what the client is saying. |
| **What client requirements and objectives may influence the development of strategies?** | Requirements may include financial, logistical, cultural, aesthetic, legal or environmental considerations, process or product specifications, company policy, OHS, maintenance services for project aftercare, and timelines for the program. |
| **What resources can be used to develop strategies to meet client objectives?** | Resources may include appropriate bodies for consultation such as private consultants, industry experts, statutory authorities, government agencies, industry organisations, community action groups, published research and reports, written and oral social and natural histories, enterprise policies, financial resources and budget, and available technologies. |
| **What research may be undertaken into the identified issue?** | Research processes may include a site inspection, a linked or off-site inspection, soil, vegetation and water surveys, leaf tissue analysis, individual plant or animal assessment, research into legal implications associated with the issue and collection of data for analysis and assessment. |
| **What organisational requirements may need to be considered when providing information?** | Occupational Health and Safety policies, procedures and programs, enterprise policies and guidelines, access and equity principles and practice, quality and continuous improvement processes and standards, job description and available resources. |
| **What types of client feedback may be relevant to this competency standard?** | Customer satisfaction questionnaires, audit documentation and reports, testimonials, informal and anecdotal feedback, quality assurance data, lapsed clients and complaints. |
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in providing specialist advice to clients relevant to agriculture, horticulture and/or conservation and land management requires evidence that a person can source and collate relevant information and respond professionally in writing to client enquiries and requirements. The skills and knowledge provide specialist information to clients relevant to agriculture, horticulture or conservation and land management must be transferable to different work environments. For example, this could include different industry settings, workplaces, and types of advice and client groups.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Products, treatments and/or services relevant to either agriculture, horticulture or conservation and land management workplaces.
- Environmental sustainability and land use issues relevant to the industry.
- Enterprise policy and procedures for customer service including handling customer complaints.
- Service standards and best practice models.
- Strategies for planning and monitoring activities.
- Consultation methods, techniques and protocols.
- Mechanisms to obtain and analyse customer feedback.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Develop and maintain specialist knowledge.
- Communicate with clients.
- Provide a response to client enquiries and needs.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet.
### RTC5908A

**Unit Descriptor**

This competency standard covers the process of preparing estimates, quotes and tenders in a horticultural, agricultural or land management enterprise. Estimates or quotes may be developed as stand alone estimates or quotes for a specific purpose, or they may be incorporated in tenders. Work is likely to be under limited supervision with checking related to overall progress by senior managers. Responsibility for the work of others and team coordination may be required. Estimating, quoting and tendering are usually performed within policy guidelines and procedures where discretion and judgement are required in the selection of technology, work organisation, and the achievement of outcomes within time and budgetary constraints.

**Unit Sector**

No Sector Assigned

### ELEMENT PERFORMANCE CRITERIA

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
</table>
| 1. Carry out preliminary planning activities for estimating, quoting and/or tendering | 1.1 Nature and scope of the project are identified in consultation with the client according to enterprise policy.  
1.2 Format, specifications and deadline for submission of the estimate, quote or tender are identified and confirmed with the client.  
1.3 Available relevant documentation is obtained and interpreted.  
1.4 Project site is inspected and reconciled with scaled drawings, project and other site plans in consultation with the client, agent or other authority. |
| 2. Determine resource requirements | 2.1 Detailed project information and monetary sums are interpreted and recorded from client specifications.  
2.2 Size, type and quantity of required project resources are identified and estimated according to client specifications.  
2.3 Sources are identified and evaluated for the procurement of suitable project resources consistent with client requirements.  
2.4 Appropriate tools and equipment are selected and used to calculate the correct size, type and quantity of each resource item.  
2.5 Unit and total cost for each resource item are calculated and documented.  
2.6 Necessary and appropriate contingency sums to complete the estimate, quote or tender are interpreted and documented.  
2.7 Calculations are accurately recorded on a price summary sheet. |
| 3. Prepare schedules for the estimate, quote or tender | 3.1 Works schedule is documented according to client specifications.  
3.2 Scheduling of resources is accurately documented consistent with the requirements of the works schedule.  
3.3 Scheduling of financial requirements is accurately documented according to enterprise guidelines. |
4. Prepare and document the estimate, quote or tender for submission to the client

4.1 Estimate, quote or tender price is calculated and checked according to enterprise guidelines.

4.2 Costed summaries and works, resource and financial schedules are compiled according to client specifications.

4.3 Quality assurance requirements, enterprise customer service procedures, conventional formatting and industry standards are strictly adhered to in the development of documentation.

4.4 Total estimate, quotation and/or tender is completed accurately and submitted to the client within the specified deadline.

4.5 Further information is provided and adjustments made according to client requirements.
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Oral and written communication with clients, suppliers, consultants, government agencies, community organisations, industry contacts and others in the enterprise work team is required.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Information may be collected through research, consultation and own experience. This information will be analysed and organised in relation to the achievement of client objectives and available resources. Estimates, quotes and/or tenders, including statistical, logistical and financial data, will be generated.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>Activities of self and other staff are planned, and delegation may be used to develop estimates, quotes and tenders.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Teamwork with staff and experts based on effective, timely communication and consultation will help to achieve deadlines for the submission of estimates, quotes and tenders.</td>
<td>3</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>Mathematical understanding will be required to evaluate, collate, calculate and present data regarding costs and resource requirements for the project.</td>
<td>3</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Problems relating to the requirements of the client, availability of information, resources and equipment, and price variations may arise when estimating, quoting and tendering, and will require problem-solving skills.</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>Technology will be required to record, store and communicate ideas and information. It will also be used to research relevant information, obtain and calculate data and produce an estimate, quote or tender.</td>
<td>3</td>
</tr>
</tbody>
</table>
# RANGE STATEMENT

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment requirements may depend on the work situations available.

For more information on contexts, environmental implications and variables for training and assessment, refer to the Sector Booklet.

<table>
<thead>
<tr>
<th>What type of project may apply to this standard?</th>
<th>The subject of the estimate, quote or tender may include works relating to agricultural production, horticultural production, amenity horticulture projects, or conservation and land management-related projects.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who may be referred to as a client?</td>
<td>Clients may include the enterprise's management, or a private individual, company, community group, government agency or a combination of these entities.</td>
</tr>
<tr>
<td>What relevant documentation may be available for interpretation?</td>
<td>Documentation may include schematic and detailed drawings, tender specifications, specified items recorded on a tender title sheet, technical data, manufacturers' specifications, enterprise policies and procedures, catalogues, price lists, project plans, designs and management plans, client financial limitations and allocations, OHS standards, statutory requirements, Australian standards, Codes of Practice, quality assurance requirements, timeline specifications, and legislation, industrial awards and enterprise agreements relating to labour and works.</td>
</tr>
<tr>
<td>What issues may be assessed during a project site inspection?</td>
<td>Issues may include access, work conditions and work requirements.</td>
</tr>
<tr>
<td>What resources may be required for project works?</td>
<td>Resources may include materials, tools, equipment and machinery, labour hours, staffing levels, technical skills and management requirements, consultant time and contracted services.</td>
</tr>
<tr>
<td>What sources may be identified for project resources?</td>
<td>Sources may include suppliers, manufacturers, equipment and labour hire agencies, contractors, consultants, or the client enterprise which may already have some or all of the required resources on site or available for project implementation.</td>
</tr>
<tr>
<td>What tools and equipment may be used for estimating, quoting and tendering?</td>
<td>Tools and equipment may include computing hardware, accounting, drafting and project management software, calculators and manual drafting and accounting tools and equipment.</td>
</tr>
<tr>
<td>What factors may be included in works schedules?</td>
<td>Factors may include details of labour requirements, staged implementation and objectives, prioritising of work activities, and scheduling of works, resource orders and deliveries.</td>
</tr>
</tbody>
</table>
What enterprise guidelines may be relevant to this standard?

Enterprise guidelines may include compliance with industry best practice standards, enterprise customer service policy, legal requirements, insurance limitations and guidelines, and enterprise OHS policy.

What items may be included in summaries?

Items may include preliminary costs, summation of resource materials, equipment and labour required, and abstract sums.

What format may be utilised for documentation of the estimate, quote or tender?

Format may include hand written, typed and printed hard copy or electronic formats, and may also support audiovisual, slide and photographic presentation.

EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in preparing estimates, quotes and tenders requires evidence that a person is able to negotiate effectively with a client and follow a logical plan to develop and document all aspects of an estimate, quote or tender to meet the requirements of the client. The skills and knowledge required to prepare estimates quotes and tenders must be transferable to a different work environment. For example, this could include different tenders and quotes for different clients.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

- Relevant State and Federal legislation, awards, enterprise agreements and management policies relating to labour hire and employment terms.
- Current pricing structures and options for supplies, services, contractors and consultants.
- Enterprise and industry standards and practices for formatting, organising and presenting financial and quantitative information.
- Business ethics in relation to confidentiality and the tendering process.
<table>
<thead>
<tr>
<th><strong>What specific skills are needed to achieve the performance criteria?</strong></th>
<th>To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Communicate and negotiate orally and in writing with staff, management, clients, contractors, suppliers, manufacturers and consultants.</td>
<td></td>
</tr>
<tr>
<td>• Liaise effectively with difficult clients and resolve issues.</td>
<td></td>
</tr>
<tr>
<td>• Research and evaluate information.</td>
<td></td>
</tr>
<tr>
<td>• Carry out financial, logistical and spatial estimations and calculations.</td>
<td></td>
</tr>
<tr>
<td>• Comply with legislative requirements.</td>
<td></td>
</tr>
</tbody>
</table>

| **Are there other competency standards that could be assessed with this one?** | This competency standard could be assessed on its own or in combination with other competencies relevant to the job function. |

| **Essential Assessment Information** | There is essential information about assessing this competency standard for consistent performance and where and how it may be assessed, in the Assessment Guidelines for this Training Package. All users of these competency standards must have access to both the Assessment Guidelines and the relevant Sector Booklet. |
RTC5913A Collect and manage data

Unit Descriptor

This competency standard covers the process of collecting, analysing and managing data. It requires the ability to determine the type and extent of data to be collected, access and collate data, evaluate data, manage, analyse and retrieve data. Collecting and managing data requires knowledge of data collection techniques and procedures, data recording and evaluation techniques, data analysis and data storage and retrieval methods.

Unit Sector

No Sector Assigned

ELEMENT PERFORMANCE CRITERIA

1. Determine the type and extent of data to be collected.
   1.1 Data requirements are clearly defined and communicated to all staff involved in data collection.
   1.2 Relevant data sources are identified.
   1.3 Type and extent of data required is clearly defined.
   1.4 OHS hazards associated with data collecting are identified.
   1.5 Data collection methods and techniques are clearly defined relative to data requirements.

2. Access and collate data.
   2.1 Data collection sheets are formatted to assist collection.
   2.2 Data is researched and/or collected from field sources according to enterprise guidelines and with standard research approaches.
   2.3 Data is collated by appropriate electronic means.
   2.4 Appropriateness of data is monitored and recorded during collection.
   2.5 Information is researched using appropriate methods and technologies.
   2.6 Sources of information are regularly reviewed for usefulness, validity, reliability and cost.
   2.7 Channels and sources of information are used effectively.
   2.8 Opportunities are taken to establish and maintain contacts with those who may provide useful information.
   2.9 Appropriate OHS requirements and work practices are followed.

3. Evaluate data.
   3.1 Data collected is relevant, valid and sufficient.
   3.2 Where data is unclear or difficult to interpret, clarification and assistance is sought.
   3.3 Where data is inadequate, additional data is obtained.
   3.4 Information is analysed for its validity and reliability.

4. Manage and retrieve data.
   4.1 Data is stored by appropriate electronic means.
   4.2 Data is presented using appropriate graphical aids and techniques.
   4.3 Data is assembled and provided to the manager/client as required and in accordance with standard research approaches.
   4.4 Data is retrieved as required.
   4.5 New methods of recording and storing data are suggested/introduced as needed.
5. Analyse and interpret data

5.1 Data is analysed using appropriate statistical and analytical techniques.
5.2 Data is interpreted to determine its significance, validity and reliability.
5.3 Findings based on the analysis and interpretation of the data is reported.
5.4 Data is organised into a suitable report format to aid decision-making.
5.5 Conclusions drawn are based on reasoned argument and appropriate evidence.

**KEY COMPETENCIES**

There are a number of processes that are learnt throughout work and life which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Through recording and presenting data to clients and enterprise personnel.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Through identification of sources of information, and retrieval, analysis and collation of data.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>In accordance with standard research approaches in line with enterprise procedures and policies.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Through participating in reviews, collaboration with colleagues and the evaluation of data.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>In compiling, analysing and evaluating data.</td>
<td>3</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Through dealing with inconsistencies in data, and difficulties in obtaining and collecting valid data.</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>Through the use of computers in sourcing, analysing, collating, reporting and storing data</td>
<td>3</td>
</tr>
</tbody>
</table>
RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this unit of competency. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

What may be included in sources of information?
Data may be based on primary and secondary sources including field work and trials, research materials, published books, academic reports, industry reports, colleagues, computer software, internet, newspapers, photographic data, journals, industry publications, industry specialists and experts.

What OHS hazards can be included in this standard?
Hazards may include manual handling, using tools and equipment, noise, dust, solar radiation, falls and tripping, spider and insect bites.

What OHS requirements may be relevant to this standard?
OHS requirements may include identifying hazards; assessing risks and implementing controls; cleaning, maintaining and storing tools, equipment and machinery; appropriate use, maintenance and storage of PPE including sun protection; safe operation of tools, equipment and machinery; correct manual handling; basic first aid; and safety procedures for protection of others.

What methods of information storage may need to be accessed?
Methods of information storage may include hard copy files, electronic databases, spreadsheets, file systems, and library collections.

What types of recording techniques may be relevant to this standard?
Recording techniques may include written, audio, video, photographic and computers.
What evidence is required to demonstrate competence for this standard as a whole?

Competence in collecting, analysing and managing data requires evidence that an individual has sourced, collected, analysed and evaluated data according to industry and enterprise standards and expectations. The skills and knowledge required to collect, manage and analyse data must be transferable to a range of work environments and contexts. For example, this could include different workplaces, types and sources of data, and reporting mechanisms.

<table>
<thead>
<tr>
<th>What specific knowledge is needed to achieve the performance criteria?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:</td>
</tr>
<tr>
<td>• Data collection techniques and procedures.</td>
</tr>
<tr>
<td>• Data recording and evaluation techniques.</td>
</tr>
<tr>
<td>• Data analysis and interpretive techniques.</td>
</tr>
<tr>
<td>• Data storage and retrieval methods.</td>
</tr>
<tr>
<td>• Data reporting methods.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What specific skills are needed to achieve the performance criteria?</th>
</tr>
</thead>
<tbody>
<tr>
<td>To achieve the performance criteria, some complementary skills are required. These skills include the ability to:</td>
</tr>
<tr>
<td>• Determine the type and extent of data to be collected.</td>
</tr>
<tr>
<td>• Access and collate data.</td>
</tr>
<tr>
<td>• Evaluate data.</td>
</tr>
<tr>
<td>• Manage and retrieve data.</td>
</tr>
<tr>
<td>• Analyse the data.</td>
</tr>
<tr>
<td>• Interpret the data.</td>
</tr>
<tr>
<td>• Follow safe work practices.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Are there other competency standards that could be assessed with this one?</th>
</tr>
</thead>
<tbody>
<tr>
<td>This competency standard could be assessed on its own or in combination with other competencies.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Essential Assessment Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.</td>
</tr>
</tbody>
</table>
## RTC5914A Prepare reports

### Unit Descriptor
This competency standard covers the process of preparing comprehensive reports for a rural, horticultural or land management setting. It requires the ability to research material, evaluate information, produce a document, and deliver an oral presentation. Preparing reports requires knowledge of information and research sources, report structure and presentation, and public presentation techniques and approaches.

### Unit Sector
No Sector Assigned

### ELEMENT PERFORMANCE CRITERIA

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Research material</td>
<td>1. Topic of the report is identified and described.</td>
</tr>
<tr>
<td></td>
<td>1.2 Sources of information are determined.</td>
</tr>
<tr>
<td></td>
<td>1.3 Information appropriate to the task is collected and organised according to enterprise standards.</td>
</tr>
<tr>
<td>2. Evaluate information</td>
<td>2.1 Information collected is relevant and sufficient to provide a full report.</td>
</tr>
<tr>
<td></td>
<td>2.2 Where information is unclear or difficult to understand, clarification and assistance is sought.</td>
</tr>
<tr>
<td></td>
<td>2.3 Where available information is inadequate, additional information is obtained.</td>
</tr>
<tr>
<td></td>
<td>2.4 Information is assessed for its validity and reliability, and is organised into a suitable form to aid decision-making.</td>
</tr>
<tr>
<td></td>
<td>2.5 Conclusions drawn from relevant information are based on reasoned argument and appropriate evidence.</td>
</tr>
<tr>
<td>3. Produce a document</td>
<td>3.1 Language is applicable to the task and audience.</td>
</tr>
<tr>
<td></td>
<td>3.2 The document is organised logically, is structured and balanced according to purpose, audience and context.</td>
</tr>
<tr>
<td></td>
<td>3.3 The document is formatted and presented according to business and enterprise standards.</td>
</tr>
<tr>
<td></td>
<td>3.4 Conclusions reached reflect the stated objectives of the report.</td>
</tr>
<tr>
<td></td>
<td>3.5 Preparation is completed within the specified timeframe.</td>
</tr>
<tr>
<td></td>
<td>3.6 Enterprise and OHS requirements and procedures are followed.</td>
</tr>
<tr>
<td>4. Deliver an oral presentation</td>
<td>4.1 Language is applicable to the task and audience</td>
</tr>
<tr>
<td></td>
<td>4.2 Presentation is organised logically, is structured and balanced according to purpose, audience and context.</td>
</tr>
<tr>
<td></td>
<td>4.3 Concise and well presented support materials are used in oral presentations to reflect industry standards.</td>
</tr>
<tr>
<td></td>
<td>4.4 Efficient time use allows clear presentation of the desired topic.</td>
</tr>
<tr>
<td></td>
<td>4.5 Oral presentation is delivered within a specified time</td>
</tr>
</tbody>
</table>
KEY COMPETENCIES

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

<table>
<thead>
<tr>
<th>Key Competency</th>
<th>Example of Application</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicating ideas and information</td>
<td>Through provision of written reports and oral presentations to clients and enterprise personnel.</td>
<td>3</td>
</tr>
<tr>
<td>Collecting analysing and organising information</td>
<td>Through identification of sources of information, and retrieval and collation of data.</td>
<td>3</td>
</tr>
<tr>
<td>Planning and organising activities</td>
<td>In accordance with standard research approaches in line with enterprise procedures and policies.</td>
<td>3</td>
</tr>
<tr>
<td>Working with others and in teams</td>
<td>Through participating in research and the preparation of reports and presentations.</td>
<td>2</td>
</tr>
<tr>
<td>Using mathematical ideas and techniques</td>
<td>In compiling and evaluating data for the report.</td>
<td>3</td>
</tr>
<tr>
<td>Solving problems</td>
<td>Through making recommendations based on reasoned argument.</td>
<td>3</td>
</tr>
<tr>
<td>Using technology</td>
<td>Through the use of computers in preparing reports and use in presentations.</td>
<td>3</td>
</tr>
</tbody>
</table>

RANGE STATEMENT

The Range of Variables defines the different contexts, work environments and parameters governing the performance of this unit of competency. The variables chosen in training and assessment will need to reflect local industry and regional contexts.

For more information on contexts, environment and variables for training and assessment refer to the Sector Booklet.

What may be included in sources of information?
Sources of data may include field work, research materials, published books, academic reports, industry reports, colleagues, computer software, internet, newspapers, journals, industry publications, industry specialists and experts.

What OHS requirements may be relevant to this standard?
OHS requirements may include identifying hazards, assessing risks and implementing controls, cleaning, maintaining and storing equipment, appropriate use, maintenance and storage of PPE including sun protection, safe operation of equipment, correct manual handling, basic first aid, and safety procedures for protection of others.
EVIDENCE GUIDE

What evidence is required to demonstrate competence for this standard as a whole?

Competence in preparing reports requires evidence that an individual has prepared and presented a report according to industry and enterprise standards and expectations. The skills and knowledge required to prepare reports must be transferable to a range of work environments and contexts. For example, this could include different workplaces, subject matter, and reporting formats.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this unit are listed below:

- Information and research sources.
- Report structure and presentation.
- Public presentation techniques and approaches.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, some complementary skills are required. These skills include the ability to:

- Research material.
- Evaluate information.
- Produce a document.
- Deliver an oral presentation.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

Essential Assessment Information

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the Assessment Guidelines for this Training Package.